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A MONTHLY JOURNAL DEVOTED TO THE ELEVATOR AND GRAIN INTERESTS.

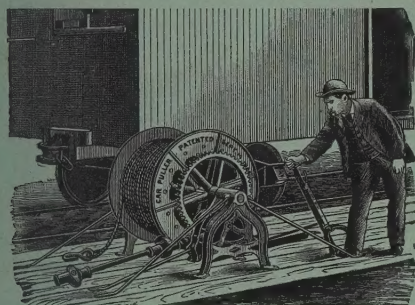
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VOL. V.

CHICAGO, ILLINOIS, FEBRUARY 15, 1887.

No. 8.

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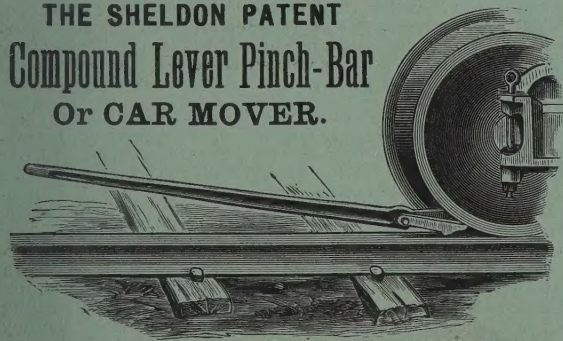


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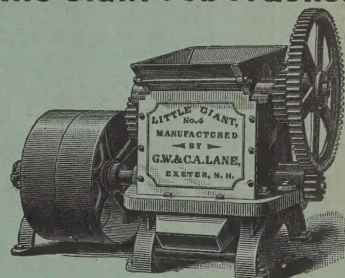
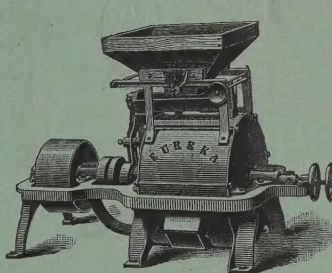
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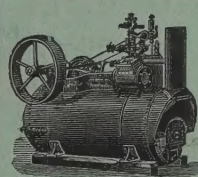


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Make just the Outfit of Custom Mills. Our System of Reduction as applied to Corn Meal  
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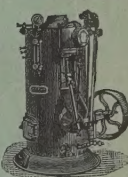
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Either Steam or Horse-power,

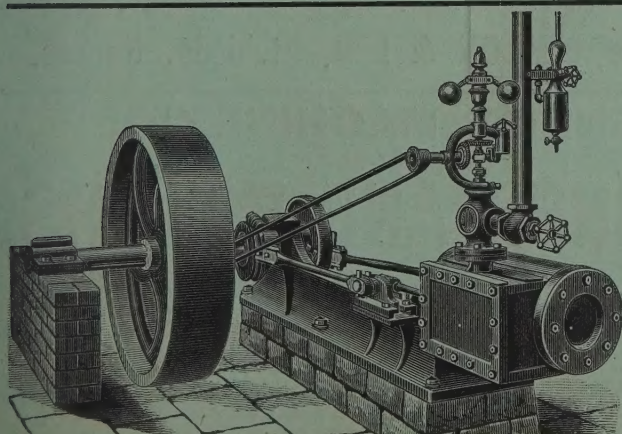
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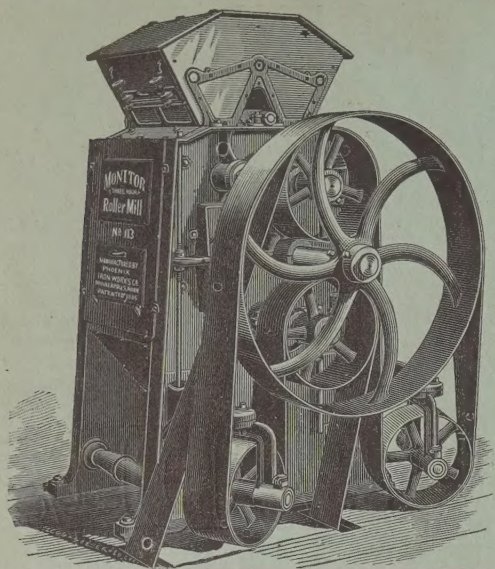
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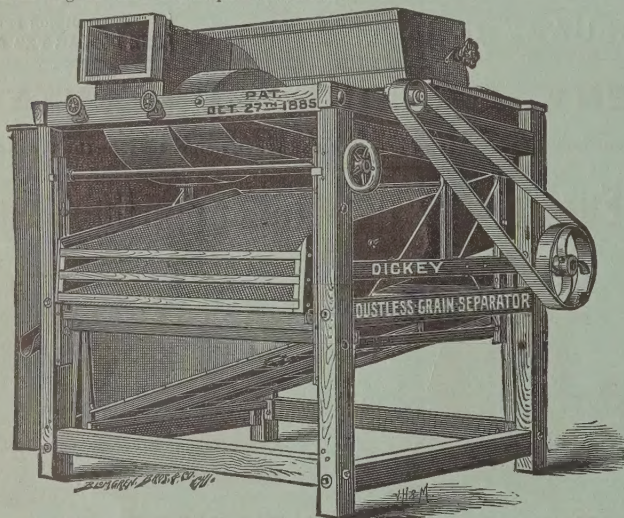
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**500**—IN OPERATION—**500**  
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Every Machine warranted on 30 days' trial.

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This Separator is our latest and most perfect, and guaranteed to be the superior of any now on the market. This machine, as can be seen by the cut, is not a warehouse fanning mill with one patent attachment, but is a Dustless Separator, made for the express purpose of thoroughly cleaning and separating all kinds of grain in large quantities; its construction is such that the working machinery and weight is all within the parts or anchors.

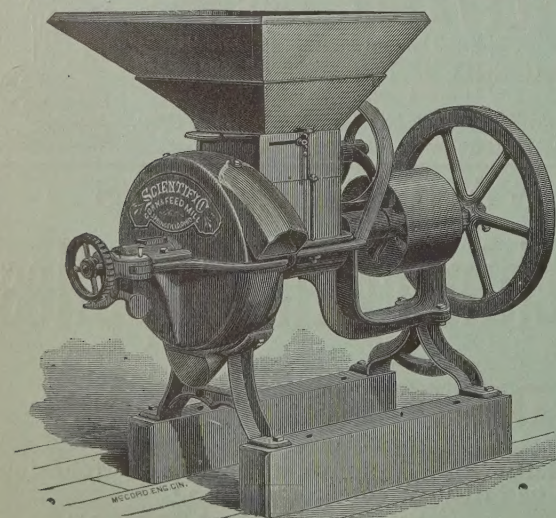


### WE CLAIM FOR IT SUPERIORITY

over everything of the kind made, in simplicity, durability, saving of power, capacity and cost of construction. Its height will accommodate any number of spouts from different points, without moving machine; they have a capacity of from 700 to 1,500 bushels per hour. We also make the Giant Dustless, formerly made by Dickey & Pease, and control the manufacture of the Standard Grain Separators. Sent on approval to any reliable party. For full particulars, address

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**EARTH**  
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Small Grains.

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special metal hard as  
Steel. Have double  
capacity, as they

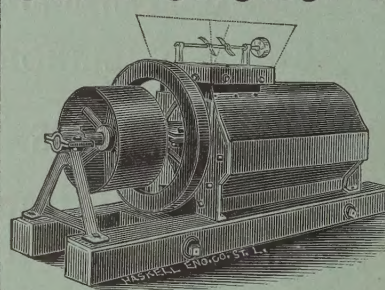
Sharpen Themselves  
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FULLY GUARANTEED.

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SEND FOR ILLUSTRATED CATALOGUE.

## KANSAS Corn Sheller! Kansas Cleaner



Manufactured only by

**SEATON & LEA,**

This Sheller possesses advantages over all others in many respects.

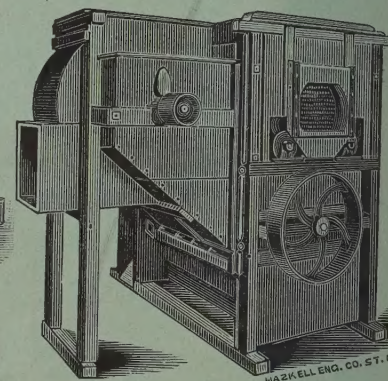
Its freedom from injury by the passage of iron, stone or other hard substances is of itself an invaluable feature, as it is well known the passage of a car link through an ordinary conical Sheller renders it unfit for further use.

The combination with the machine of an automatic feeder whereby a constant flow of corn is maintained is another feature of great importance, insuring a steady delivery of corn to the machine, and preventing its bridging over in the bin, saving an extra man. The construction of the shelling cylinder is such as to secure a greater capacity than is attained in any other sheller, for the reason that as soon as the corn is liberated from the cobs it is discharged from the sheller, instead of making an almost solid mass to be carried along and finally discharged with the cobs at the tail of the machine.

We make three sizes: No. 1, 400 to 700 bushels; No. 2, 600 to 1,000 bushels; No. 3, 2,000 bushels per hour.

We manufacture extra large sizes of Shellers and Cleaners for Large Elevators, where great capacity of work is required. Also Re-Cleaners for Wheat, Corn and other grains. Different Sizes; Capacity from 2,000 to 7,000 bushels per hour.

Address, SEATON & LEA, Atchison, Kansas.



**COMBINED.**

We guarantee this cleaner will perform good work for elevator and warehouse purposes on any kind of grain, without any change other than to regulate the suction of fan.

For simplicity and durability it is absolutely unexcelled. We make of this machine also two sizes to correspond with our sheller, but for special purposes build machines of any capacity up to ten thousand bushels per hour.

A FACT WE WISH TO IMPRESS.—That in the use of this cleaner you dispense with an extra Separator, Boot, Belting, Cups, Lumber and Room necessary in locating and operating them, thus saving largely in the cost of your elevator, both in construction of building and other machinery over other cleaners now in the market. DON'T FORGET THIS.

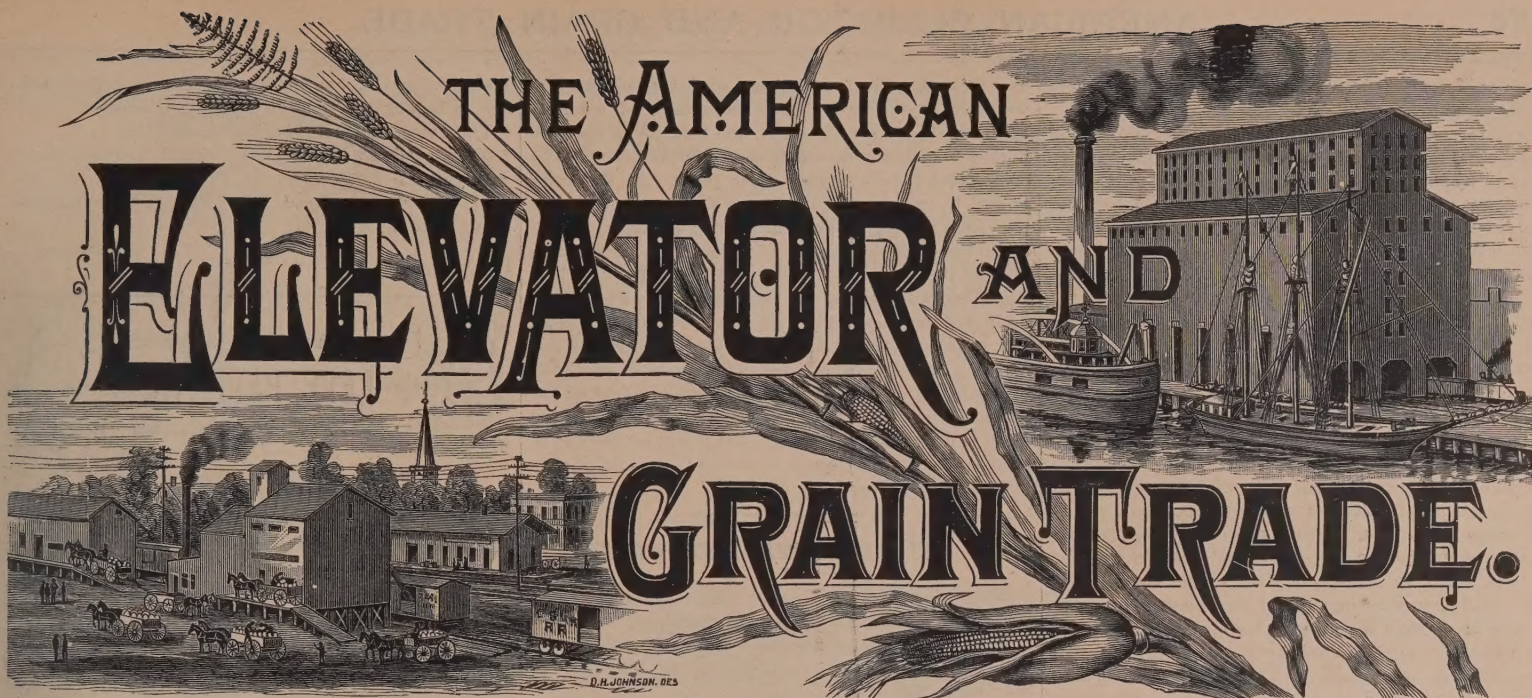
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—MANUFACTURERS OF—  
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### AN EASTERN ELEVATOR.

Midway between New York and Albany, on the east bank of the Hudson River, stands Poughkeepsie, a thriving and beautiful city of about 25,000 inhabitants. Although comparatively a small town, it is well known in all parts of the Union, being the seat of the famous Vassar College; and when the great bridge, now building and to be completed by Jan. 1, 1888, spans the Hudson River at this point, Poughkeepsie will be one of the important railroad centers of the country.

Among its many prosperous business houses, perhaps one of the oldest and largest, is that of Reynolds & Co., a cut of whose warehouse and elevator appears in this issue of the AMERICAN ELEVATOR AND GRAIN TRADE. The business of this house was established in a small retail way by James Reynolds, the grandfather of the members of the present firm, in 1820 (when what is now the city was a small village), and has steadily increased until the firm is now doing perhaps the largest business in flour, feed and grain of any house on the Hudson River.

The elevator has a storage capacity of 80,000 bushels of grain, and is furnished with all the latest and best improvements for handling and cleaning grain at the rate of 2,500 bushels per hour.

The warehouse is one of the most conveniently arranged for handling and shipping merchandise to be found in the country, and has a storage capacity of nearly 10,000 barrels of flour.

In addition to their home trade, REYNOLDS & Co. distribute large quantities of grain, feed and flour in car lots to dealers on the line of the New York Central, New York & New England, New York, Lake Erie & Western Railroads, shipping the same directly from the West.

The firm makes a specialty of mill feeds, and particularly invites millers having feed to dispose of to send them samples, and solicits the correspondence of millers and grain dealers generally.

Being constantly in telegraphic communication with all the leading grain markets of the West through their own special agents, and also represented on the New York Produce Exchange by one of the firm, their facilities for transacting business are very complete and thorough, and enable them to offer many inducements to their customers.

The members of this firm are comparatively young men, but by careful attention to all the details of their business and well-directed energies, have succeeded in taking a leading position in commercial circles.

The smuggling of hops and barley has been carried on to a great extent by means of teams across the frozen water between Canada and the United States.

### SUMMARY OF THE INTER-STATE COMMERCE BILL.

The bill has for its object the regulation of commerce between the states, with a view to the prevention of acts of injustice on the part of railroads to persons, firms, corporations or localities.

Section 1 applies the provisions of the act to any common carrier engaged in the transportation of passengers wholly by railroad, or partly by railroad and partly by water, when both are used, under a common control, management or arrangement, through more than one state or territory or from any place in the United States to an adjacent foreign country. It defines the

ing to their respective powers, afford all reasonable, proper and equal facilities for the interchange of traffic between their respective lines, and for the receiving, forwarding, delivering of passengers and property to and from their several lines and those connecting therewith, and shall not discriminate in their rates and charges between such connecting lines.

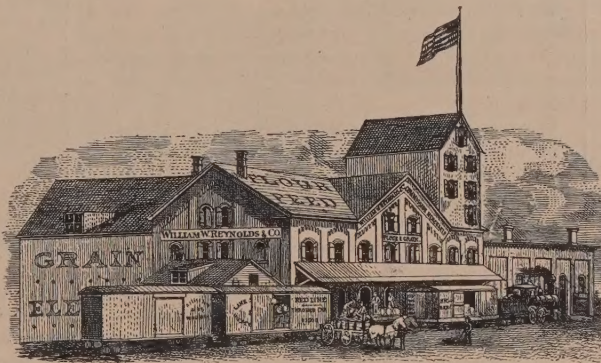
Sections 4 and 5—the long and short haul and pooling sections—are as follows:

Section 4. That it shall be unlawful for any common carrier subject to the provisions of this act to charge or receive any greater compensation in the aggregate for the transportation of passengers, or for like kind of property, under substantially similar circumstances and conditions, for a shorter than for a longer distance over the same line, in the same direction, the shorter being included within the longer distance; but this shall not be construed as authorizing any common carrier within the terms of this act to charge and receive as great compensation for a shorter as for a longer distance: provided, however, that upon application to the commission appointed under the provisions of this act, such common carrier may, in special cases, after investigation by the commission, be authorized to charge less for longer than for shorter distances for the transportation of passengers or property, and the commission may from time to time prescribe the extent to which such designated common carriers may be relieved from the operation of this section of this act.

Section 5. That it shall be unlawful for any common carrier, subject to the provisions of this act, to enter into any contract, agreement or combination with any other common carrier or carriers for the pooling of freights of different and competing railroads, or to divide between them the aggregate or net proceeds of the earnings of such railroads, or any portion thereof; and in any case of an agreement for the pooling of freights as aforesaid, each day of its continuance shall be deemed a separate offense.

Section 6 requires that after ninety days from the passage of the act every common carrier subject to its provisions shall have printed, and keep for public inspection, schedules showing rates, fares and charges, and in addition to requiring the railroads to give publicity at all of the depots on their several lines, it gives authority to the commission, where it is proper and necessary, to require them to give publicity to their rates to other places beyond the lines of their several railroads. It also provides that the rates, fares and charges shall not be raised, except after ten days of public notice, but that they may be reduced without previous public notice; the notice, however, shall be simultaneous with the reduction itself.

Section 7 makes it unlawful for any common carrier to enter into any combination or agreement to prevent the



REYNOLDS & CO'S ELEVATOR AND WAREHOUSE AT POUGHKEEPSIE, N. Y.

term "railroad" to include all bridges and ferries used or operated by any railroad. All charges made for any service rendered in the transportation of passengers or property shall be reasonable and just; and every unjust and unreasonable charge for such service is prohibited and declared to be unlawful.

Section 2 makes it unlawful for any common carrier subject to the provisions of this act to charge, demand, collect or receive, directly or indirectly, from any person or persons, a greater or less compensation for any service rendered in transportation of passengers or property than it charges, demands, collects or receives from any other person or persons for doing for him or them a like and contemporaneous service in the transportation of a like kind of traffic under substantially similar circumstances and conditions.

Section 3 makes it unlawful for any common carrier subject to the provisions of this act to make or give any undue or unreasonable preference or advantage to any particular person, company, firm, corporation or locality, or any particular description of traffic. Every common carrier subject to the provisions of this act shall, accord



carriage of freights from being continuous from the place of shipment to the place of destination.

Section 8 declares that any common carrier violating any provisions of the act shall be liable to the person or persons injured thereby for the full amount of damage sustained in consequence of any such violation, together with a reasonable counsel or attorney's fees.

Section 9 provides that persons claiming to have been damaged by the action of common carriers may proceed for recovery of their damages, either in the courts of the United States or before the commission herein provided for, but not before both tribunals.

Section 10 makes it a penal offense to violate any of the provisions of this act, and puts the maximum of the fine which may be imposed at the sum of \$5,000.

The eleven following sections contain the commission features of the bill. They provide for a commission to consist of five persons, whose term of office shall be for six years, except for the first appointments, which are to be for two, three, four, five and six years. The members of this commission are to be appointed by the President by and with the advice and consent of the Senate. The principal office shall be in Washington, but they may hold sessions at other places than Washington, and a single member of the commission may take testimony anywhere, as may be directed by the commission. These commissioners have salaries of \$7,500 each. The commission has the power to appoint a secretary with an annual salary of \$3,500, and has authority to employ and fix the compensation of such other employees as it may find necessary to the proper performance of its duties, subject to the approval of the secretary of the interior.

Section 22 provides that nothing contained in this act shall abridge the remedies now existing at common law or by statute.

Section 23 appropriates \$100,000 for the purposes of this act for the fiscal year ending June 30, 1888.

Section 24 provides that the provisions of Sections 11 and 18 of this act, relating to the appointment and organization of the commission, shall take effect immediately, and the remaining provisions of the act shall take effect sixty days after its passage.

### HOW IT WORKS.

A Chicago commission merchant has been telling *Daily Business* how the bucket-shop manipulation of the wheat market is carried on. He said:

"Whenever the market looks especially strong everybody wants to buy a little wheat. The fellows on the Board buy some, and every fellow in the country invests a few dollars. The country trades through the bucket shops, and the aggregate amount of wheat bought in small lots is very large; some days, I am reliably informed, running up as high as 50,000,000 bushels. Two or three central concerns in this city have 400 or 500 agencies and branch bucket shops scattered through the country, and they get reports every afternoon of the amount of business done at each one of them. These few central concerns handle two-thirds of the bucket-shop business of the whole country. The country shops clear their trades through the main houses in this city, and every afternoon the managers go home knowing exactly how the country stands. On an active bull day they leave off 40,000,000 or 50,000,000 bushels short to the country. The next morning, if the conditions are favorable, a certified check for \$50,000 is put in the hands of Slapdash, the broker, who is directed to 'unload' 1,000,000 bushels of wheat at the opening regardless of price. The wheat must be got rid of at once. The market closed weak the night before, and it is safe to assume that the country had caught on at the top, with its 1c. margin. Mr. Slapdash does not know anything about that, nor does he care. He knows that he has received a certified check for \$50,000 from a capitalist, perhaps unknown as a bucket-shopper, and an order to get rid of 1,000,000 bushels of wheat quick. This he proceeds to do after the most approved fashion, breaking the market in a jiffy within a split,  $\frac{1}{4}$ c. or  $\frac{1}{2}$ c. of the limit to which the country is margined. The scalpers tail on and help the thing along. They always try to go with the big orders—to swim with the current. When the market gets down to within a small fraction of the freeze-out limit, Broker B appears with a certified check for \$12,500 or \$15,000 in his pocket and a club in his hand in the shape of an order to sell 250,000 or 300,000 wheat the minute the price touches—well, we will say 84c. 'Dump it,' are his instructions; 'offer it below the market; sell it at 83 $\frac{1}{2}$ c.; sling it.' An official quotation, 83 $\frac{1}{2}$ c., goes out

over the tape. The 1c. margins of 20,000 victims who were long 40,000,000 or 50,000,000 bushels of wheat to the bucket shops are wiped out, and \$400,000 or \$500,000 in money goes into the coffers of the bucket shops. The manipulators have gained their point. At this point broker C, representing the bucket-shops, appears in the pit with a \$50,000 certified check in his pocket, and an order to buy 1,000,000 bushels of wheat. The market turns up, and the tailers go with it. It reacts  $\frac{1}{4}$  to 1c. The wheat that was dumped has been bought, the deal adjusts itself, and the bucket shop man gets out with a very small loss, or perhaps no loss at all. Brokers Slapdash, B and C pocket nice commissions, the victims growl at the Board of Trade, call it a robber, and go right along feeding the bucket-shop tiger. This game has been played again and again to my certain knowledge, and it will continue to be played until the law steps in to protect the public by wiping the bucket shops out of existence."

### OUR DULUTH LETTER.

Wheat at this point during the past month has ruled very inactive, barring an occasional flurry, causing a momentary increase in the transaction, and prices have gradually decreased from 86 $\frac{1}{2}$ c. for May on the 13th ult. to 84 $\frac{1}{2}$ c. on the 8th inst.

On the 9th the market opened at 84 $\frac{1}{2}$ c., and soon developed a weakness that had been constantly growing for some time.

The big stocks and small demand seemed to be at last telling in the price of wheat.

Selling was very heavy, and was kept up freely most of the day. Great blocks were offered, and the market was the most active for several months. After a cent and a half decline, and a quarter advance, it closed at 83 $\frac{1}{2}$ c., and sold on the curb afterward at 82 $\frac{1}{2}$ c. To-day (10th) was another active and exciting day; transactions footed up from 5,000,000 to 6,000,000 bushels.

There was no strength outside of that caused by momentary periods of buying, the market fluctuated frequently, and was extremely nervous at all times. Opened at 82 $\frac{1}{2}$ c., declined to 82 $\frac{1}{4}$ c., and closed slightly firmer at 83 $\frac{1}{2}$ c.

The Board of Trade voted on the 19th inst. to appoint a committee to prepare a bill for presentation to the legislature for the suppression of bucket shops.

The Board on the 5th inst. instructed by resolution the officers, directors, and transportation and freight committees to take such steps as may be best calculated to secure an Eastern rail rate upon grain identical at all times with that in force between St. Paul and Minneapolis and all Eastern points.

What we need is a rate that would allow shipments of wheat to the seaboard during the winter months.

State Senator Whiteman, from this district, has introduced a bill in the legislature authorizing the shipment of wheat on the surrender of duplicate receipts, which shall be retained by the elevator company until originals are turned in and canceled.

The bill provides ample safeguards for all concerned, and will probably prove the solution of the vexed question as to shipments and the cancellation of receipts.

The Duluth & Western Elevator Co.—proprietors of the burned St. Paul & Duluth Elevator—have about perfected arrangements for a 1,500,000-bushel house.

The Duluth Elevator Co. (composed of A. J. Sawyer, Duluth; F. H. Peavey, Minneapolis; P. B. Weare, Chicago, et al.) will shortly begin elevators of 3,000,000 bushels' capacity, at West Superior, Wis., on property owned by the Omaha Railroad. The elevators will be mostly used for corn brought here by the forenamed company.

The Great Northern Elevator Co. is prepared to build a consort to its elevator. The capacity of the house has not been learned.

The new officers elected by the Board of Trade on the 18th inst. are: Owen Fergusson, President; A. D. Thomson, Vice-President; F. S. Daggett, E. A. Gilbert, O. C. Hartman, and Geo. H. Dodge, Directors.

C. E. Van Bergen, late manager of the Western Union Telegraph Co. at this point, has become a member of the firm of Macfarlane & Hartman, which will hereafter be known as Macfarlane, Hartman & Co.

The State Chief Grain Inspector has not yet been appointed.

The trade here favor Mr. L. A. Gilbert, of St. Paul, and his chances for appointment are good.

Prof. Phelps, late secretary of the St. Paul Chamber of Commerce, has assumed his duties as secretary of the

Duluth Chamber, and it is hoped he may be as successful here as he was in St. Paul in attracting industries.

The Union National Bank was opened Feb. 1.

Messrs. Paine & Lardner have opened a private bank, with a capital of \$50,000. Mr. Paine was formerly cashier of the Duluth National. Mr. Niles is a capitalist residing at Niles, Mich.

PROBUS.

Feb. 10, 1887.



Issued on Jan. 14, 1887.

BAG HOLDER.—Frederick Haydon, Bridgeport, Conn., assignor of one-half to Wm. H. Hockensmith, same place. (No model.) No. 356,198. Serial No. 209,765. Filed Aug. 2, 1886.

CHAIN FOR TRANSMITTING MOTION.—Harvey P. Mallison, Philadelphia, Pa. (No model.) No. 356,324. Serial No. 214,524. Filed Sept. 25, 1886.

GRAIN SCOURER.—Giles S. Cranson, Silver Creek, N. Y., assignor to Cranson, Huntley & Co., same place. (No model.) No. 356,273. Serial No. 203,382. Filed May 27, 1886.

Issued on Jan. 25, 1887.

BALING PRESS.—Maurice T. Brown, Tyler, Tex. (No model.) No. 356,445. Serial No. 198,691. Filed April 13, 1886.

BALING PRESS.—Gilbert S. Lay, Bassett, Neb. (No model.) No. 356,481. Serial No. 208,468. Filed July 19, 1886.

CAR-STARTER.—Phillip Listeman, Collinsville, Ill. (No model.) No. 356,593. Serial No. 192,443. Filed Feb. 18, 1886.

HOPPER.—William R. Fee, Cincinnati, Ohio, assignor by mesne assignments to the National Cotton Seed Oil and Huller Company, Memphis, Tenn. (No model.) No. 356,581. Serial No. 26,403. Filed Feb. 17, 1881.

Issued on Feb. 1, 1887.

BAG-HOLDER.—Harry A. Murtoff, Boiling Springs, Pa., assignor of one-half to Sam'l B. Best, same place. (No model.) No. 356,780. Serial No. 208,954. Filed July 24, 1886.

BELT FOR DRIVING MACHINERY.—Maurice Gandy, New Brighton, County of Chester, assignor to the Gandy Belt Manufacturing Company (Limited), Liverpool, Eng. (No specimens.) No. 356,933. Serial No. 217,341. Filed Oct. 27, 1886.

SHEET METAL ROOF.—Frank E. Sagendorph, Chicago, Ill., assignor of one-half to Sam'l B. Starr, same place. (No model.) No. 357,041. Serial No. 219,873. Filed Nov. 26, 1886.

Issued on Feb. 8, 1887.

COMPOUND FOR ROOFING AND PROTECTING METALS.—Frederick H. Snyder, Jersey City, N. J., assignor of one-third to Geo. W. Richardson and Martin Luscomb, both of Boston, Mass. (No specimens.) No. 357,104. Serial No. 165,677. Filed Oct. 22, 1883. Renewed May 15, 1885.

CONVEYING MACHINE.—Jas. M. Dodge, Philadelphia, Pa. (No model.) No. 357,145. Serial No. 217,341. Filed Oct. 28, 1886.

BALING PRESS.—Samuel T. McCanless, Cartersville, Ga. (No model.) No. 357,400. Serial No. 215,572. Filed Oct. 7, 1886.

CAR STARTER AND BRAKE.—Richard B. Avery, New York, N. Y., assignor of one-half to George B. Hulme, same place. (No model.) No. 357,263. Serial No. 202,766. Filed May 20, 1886.

FANNING MILL.—Christopher Altringer, Racine, Wis. (No model.) No. 357,261. Serial No. 190,446. Filed Feb. 1, 1886.

GRAIN WINNOWER.—Chas. J. Ericson, Salt Lake City, Utah. (No model.) No. 357,525. Serial No. 207,242. Filed July 6, 1886.

HAY PRESS.—Chas. A. Hamilton, Meriden, Miss. (No model.) No. 357,480. Serial No. 210,244. Filed Aug. 6, 1886.

HORSE POWER.—Benjamin A. Lombard, Stockton, Cal. (No model.) No. 357,212. Serial No. 199,496. Filed April 20, 1886.



## STEVENS' PATENT COMBINED CORN AND COB MILL.

The firm of A. W. Stevens & Son, of Auburn, N. Y., have long been favorably known to the public as the manufacturers of French Buhr Corn and Feed Mills, corn shellers, engines, etc. Their mills are in extensive use in many establishments in all parts of the country, and it was by this extensive use and acquaintance with the wants of the trade they found that there was an urgent demand for a mill which would successfully grind corn and cob together. A knowledge of this fact led them to perfect the machine pictured on this page. It is the result of thorough experiment, and is covered by letters patent. It must be confessed that this idea of a combined machine is a happy one. So far as we know, it is the only combined corn and cob crusher and mill manufactured.

The crushing attachment is driven by a train of gears direct from mill spindle; these gears can be thrown in or out of mesh by means of a hand lever, shown in cut, thereby allowing the mill or sheller to run independently if desired. The crusher does not shell the corn, but crushes the corn and cob together rapidly and evenly, so that it is readily fed through the buhrs. It is strong and simple, so that there is practically nothing to get out of order. It will crush thousands of bushels of corn and cob before showing any signs of wear, and last for years without expense for repairs. The mills to which the crushers are attached are the regular 20, 22, 24 and 30-inch. After the corn and cob has been run through the crusher it can be ground between the buhrs to any desired grade, from the coarsest feed even to fine meal.

As to the mill itself, the frame is of the very best quality, well-seasoned material; the mill is nicely made, great care being taken in its construction, and neatly painted and varnished. The upper part of the frame to which the top stone is fastened is tenoned and pinned, besides having two strong rods or bolts running through it, thus making it unquestionably strong and rigid. This, of course, is necessary in order that the upper stone may be held rigid and secure. After being carefully set and securely fastened to the frame, a coating of plaster of Paris is put upon the upper stone, thus giving it a nice and smooth finish. The spindle is steel, has a large bearing, and placed as near the runner as possible. The step is chilled iron and nicely fitted to the bridge tree, in which it is allowed a little liberty. It is supported by the lighter bar, and by this, in connection with the hand-screw wheel, is raised and lowered as desired. The feed is arranged so that it can be regulated to suit the operator. The hopper is large and roomy, so that an elevator is not needed, and the mill does not require such close attention as if the hopper were small. The driving pulley has a wide face, and its diameter is as large as the required motion will allow. A hub with projecting ribs is firmly fastened to the runner stone by running metal between the stone and hub. The stone is then chucked in the lathe, and the hub bored true with the running face. The hub is then slotted and securely keyed to the spindle, so that the stone is held fast to the spindle and is always true.

The manufacturers guarantee this combined machine to do perfect and successful work, and invite the closest inspection. They claim that no other device will do this class of work successfully, asserting that iron and steel crush the corn and cob, instead of grinding it. They will be glad to send samples of the work done by their combined mills, in order that interested parties may see just what the machine will do. They invite correspondence, and interested parties should address the manufacturers, A. W. STEVENS & SON, Auburn, N. Y.

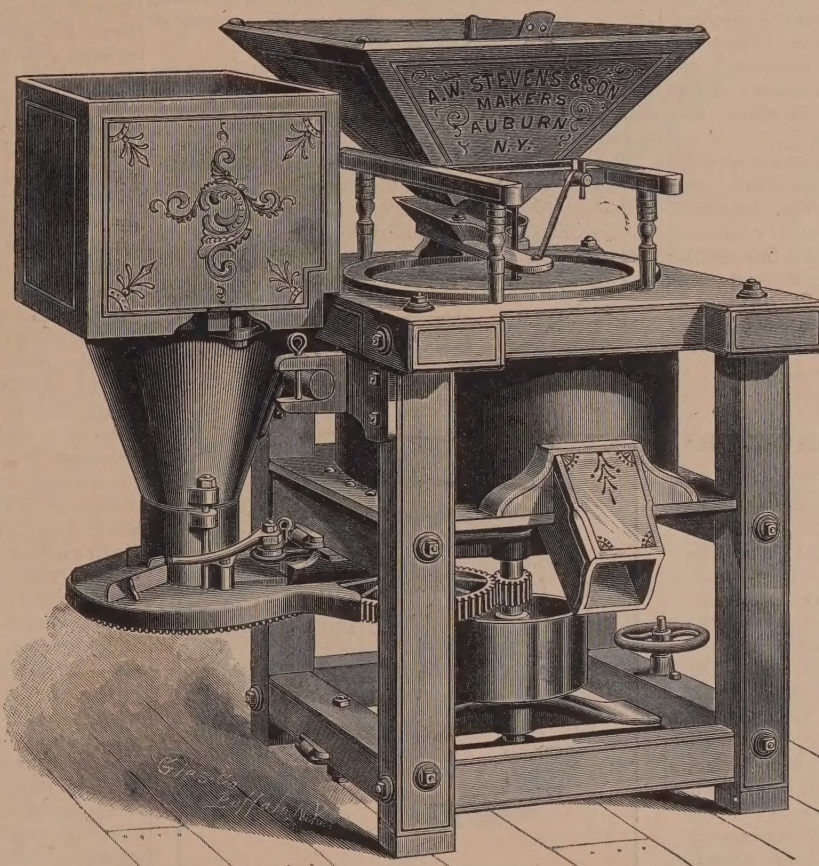
The Southern farmers and planters threaten to have all the laws repealed which permit the mortgaging of the crops in the field. The rates of interest are enormous, and the people are kept poor.

## SOUTHWESTERN POINTERS.

[Special Correspondence AMERICAN ELEVATOR AND GRAIN TRADE.]

KANSAS CITY, Mo., Feb. 11, 1887.

The elevators at this point during the past month have been doing about the same amount of business as during last year during the same time. This is not saying much for these institutions at their best. Two years ago the elevators did fully three times the amount of trade they are enjoying now. Of course the average elevator man takes a good deal of satisfaction in imagining what the future has in store for him. He has spent the bulk of his time the past two years in the same way and is getting used to it. There is no such thing as disappointing the elevator fraternity of Kansas City. It has gotten beyond this long ago. If good crops fill up their elevators the coming year, well and good; if the reverse happens they still live on hope, and they have succeeded so admirably in eking out a livelihood in this direction that it is actually



STEVENS' PATENT COMBINED CORN AND COB MILL.

a question if they would know how to stand fortune if it should take it into its head to pour money into the pockets of the expectant crowd.

At the time the present lethargy struck the crowd here, your correspondent heard all kinds of rumors as to vast improvements that were to be made in the near future and to the able manner the trade of neighboring sections was to be attracted here. Now these rumors are no longer heard. The average man appears to be willing to let things take their course, and to let well enough alone. The few who did go ahead and put a sum of money into improvements are still looking in vain for returns on the amount invested. Of course it is the question if this year will repay the patient fellows or not, with the chances so far in favor of slight reimbursements.

At present there is a good deal of wheat passing through this point for the North. This portion of the yield the business men hold that they cannot stop here owing to the fact that agents for far Eastern houses have already bought the same, and desire it brought at once to their doors. Of course the stranger would naturally ask why local dealers do not send out buyers in the same way to drum up trade. They do, and as good drummers as those from the East. Unfortunately, freight discriminations are every time in favor of the long haul, and until this is a leading milling point, it is probable that there will be no remedy for this condition of things.

The Board of Trade men have done everything possible to bring about a different status of affairs. This year they

even went so far as to send their secretary to Jefferson City to the legislature to see if he could not bring about railroad laws that would give the solution of the problem. He is withal a most able man and has brought to his assistance some of the ablest minds in the state. If any man can accomplish anything in this respect he is the one. Judging from the present outlook it is exceedingly questionable if he proves to be the Moses to deliver the elevator men from the chains of opposition railroad rates that have so long beset them. The fact of the matter is that railroads have plenty of money to lobby through almost any measure they may desire, and this is not the case with the Board of Trade. Until a good-sized purse is made up it is doubtful if any work is developed in this line. Again, if protective laws are passed they are exceedingly difficult to enforce. The magnates have as many ways of dodging obnoxious laws as a fox has hairs in his tail.

There is then but one solution, and that is manufactures. Until Kansas City becomes a terminal point for a number of influential roads, she cannot expect to effect much toward becoming a leading grain market in the land. If these same elevator men would attract wide-awake millers here they might find that they had partially solved the problem—but only partially.

The latest reports from Kansas and Missouri are to the effect that winter wheat is in fair condition. Now and then some bear brings out glowing reports of a prospective immense crop. This is all nonsense. There will probably be an average crop, taking the whole of these two states together. Some counties will scarcely reap enough to pay them for the sowing of their wheat, while others, especially the more southern ones, will do very well if the present signs hang out until harvest time. Whenever the readers of the AMERICAN ELEVATOR AND GRAIN TRADE are assailed with reports of wonderful prospects for winter wheat, they will act wisely to take the news with a grain of salt. The acreage is about the same as last year at the same season of the year, and while the crop will be larger, yet it will not be more than the average one had for five years past.

The wheat in city elevators at present amounts to 303,512 bushels, divided into the following grades: No. 2 red winter, 68,039; No. 3 red winter, 37,835; No. 2 soft winter, 78,016; No. 3 soft winter, 361,630; No. 4 winter, 30,902; rejected, 11,407; No. 2 spring, 7,415; No. 3 spring, 7,291, and rejected spring wheat, 2,842. So far as amount in

store is concerned, corn shows up much more liberally, there being 399,375 bushels held here as follows: No. 2, 285,158; No. 3, 1,728; No. 4, 600; No. 2 white, 42,844; high mixed, 1,109. This makes about five times the quantity of corn in the city that was here last February. Notwithstanding the greater supply of this cereal, trading has been about the same as last year. As to oats, there are not more than enough to supply the local demand. With only 19,404 bushels in store, it is easy to see that the city could ill afford much for outside consumption and at the same time have sufficient for her own use. The above supply consists of 920 bushels of No. 2 white, 8,484 bushels of No. 2 and 187 of rejected. The list of visible supply of grains is closed with the statement that 6,933 bushels of No. 2 rye are to be found on hand at this writing.

Since the last letter there have been 116,600 bushels of wheat received, 124,381 of corn, 32,483 of oats and but 2,202 of rye received. The above as compared to last year represents double the amount of wheat, about the same quantity of corn and twice that of oats. Values have been downward as a rule. No. 2 red wheat sank from 70 to 68 cents, and No. 2 corn from 30 to 29½ cents. At no time has there been any great excitement. The Board of Trade fellows have been contented to let things take their own course, and while here and there a small-sized splurt would be had, yet it was not of sufficient dimensions to call a boom. In speculation there has been next to nothing accomplished. Those who have been in



the habit of indulging in this pastime do not like the appearances of things well enough just now to risk their good money to any great extent until things become more settled. These rumors of war, of a shortage in the visible supply, of railroad pools and the like, have proven too much for even the old-timers, and they have resigned their accustomed seats until the clouds present more of a silver lining. The heavier speculators have hied themselves to Chicago, or other Eastern points, where they think they will have more of an inside track to win. Now and then one drops back telling a tale of what he might have done if things had been different, but very few come telling of gold that rolled into their pockets.

From the above it must not be supposed that the city is dead, for it is far from it. There is not a more active centre in the land than this same Kansas City. The bulk of the fortunes made here, however, is not by means of wheat and corn deals. Real estate is becoming dearer and dearer to the average Board of Trade man, and many are the thousands of dollars that have dropped into their open pockets within the past month. It is evidently the intention to load up with sufficient funds to be prepared to tackle the cereal tiger at the proper time. This is one of the best attractions for a Western city—when one thing sleeps another comes to the rescue, and as is well known, the man is the happiest and most fortunate who has numberless resources at his command.

Reports from interior points throughout Kansas come to hand that the elevator builders are having a lively time of it, and that there is no appearance of a cessation of the demand for elevators along the lines of new railroads that are being finished. This is a Godsend to these gentlemen. It is doubtful if there is a state in the land where there are more elevators in course of construction than in Kansas. This is particularly the case so far as the western and southern sections are concerned. Let the good work go on. There is room enough for dozens more in tributary sections.

### WEIGHING GRAIN IN ELEVATORS.

The recommendation contained in the report for 1886 of the Illinois Railroad and Warehouse Commissioners to the effect that the warehouse law should be so amended as to direct the weighing over of grain stored in elevators periodically and not oftener than four times within a year, provoked some discussion among elevator men in this city. The general impression among them seems to be that the proposed amendment to the law is not only unnecessary, but actually silly, so uncalled for does the measure contemplated seem to be. They claim that the indemnity bond given by the warehouse firms is ample security for any shortages that might be found to exist from time to time in the ordinary transaction of business. They say they do weigh up the grain in the houses in the winter time, as a precaution and for their own information, and to saddle them with the duty of frequently doing this throughout the year would be both expensive and impracticable.

"If," said Mr. George L. Dunlap, "the warehouse commissioners want to so amend the law, let them do it; but I can not forbear from thinking that it is a very unnecessary and silly recommendation. If there is any business carried on in Chicago where commercial integrity and responsibility are vitally necessary it is the elevator business. Personally, I should have no objection to the new recommendation, provided the state would make such an appropriation to meet the expense of this reweighing as would relieve us of such a burdensome and unjust tax. It takes some coal and men to weigh up from two to four million bushels of grain. Who is to pay for it? If the state will pay for it, well and good, but if some such provision were not made I should be very strongly opposed to it. I consider it highly unnecessary in any case."

The manager of Armour, Dole & Co.'s and the Chicago, Burlington & Quincy elevators, Mr. Burrell, took the view that the contemplated amendment to the law would be entirely impracticable, and would be a considerable hindrance to the transaction of business. In the spring months it would be very impracticable, and would also be quite expensive. He thought, too, that distributing and weighing up grain several times in the year would be very apt to injure its quality, and in certain months would be carried out only at a considerable risk of making hot grain. Several other elevator men took similar ground, and the general opinion among them is that the proposed amendment would not bring about any practical good anyhow, while it would be an irksome exaction, alike unnecessary and expensive.

### MOTIVE POWER ON CANALS.

In 1871 the legislature of New York offered a prize of \$100,000 for a method of propelling canal boats on the Erie Canal, and a commission, of which Gen. Geo. B. McClellan was chairman, was appointed to examine the plans submitted. The conditions under which the prize was offered required that the minimum speed should be three miles per hour, without damage to the banks of the canal, and the exhibit to be of boats in actual service, and not models or drawings alone. It was also required that the cost of operation should be less than animal power.

A great number of projects were submitted, without much results, and in 1873 the time was extended for one year.

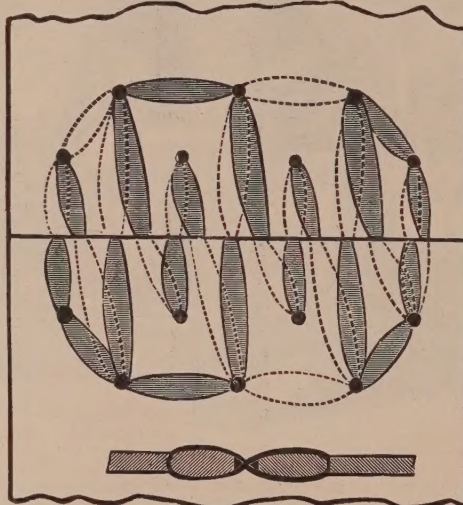
In 1874 the committee reported that they were unable, under the law, to make any award, but that the boats Wm. Baxter and Wm. Newman came the nearest to filling the conditions. No award was made at the time, although we believe a portion of the prize was afterward divided among some of the competitors, but no results of any consequence were developed.

The real difficulty lay, not in the actual injury to the banks of the canal, but in the fact that the system, to be satisfactory, must be less costly in everyday operation than animal power.

The speed of three miles per hour was not found to injure the banks, but the expense of operation as compared with mule power was the real difficulty. The most complete account of the various systems proposed and the difficulties met with, is to be found in the files of the *Scientific American* from 1871 to 1874.—*Power and Transmission.*

### A BELT LACE.

While lacing is on the brain, I will give another style of belt lace. The reason I bring it in connection with the



other is, that some of my friends may stick on the "puzzler" and I think they have ruined their belts. They can get out of the trouble by lacing as in engraving, which is the hinge lace, and is familiar to many. It is started in the center of the belt and crossed on neither side, the cross being between the ends of the belt, as shown below. This makes as smooth a lace as the "puzzler," and should have the cross stick at 1, 2 and 3 to take the wear off the strained lace. This lace is exactly alike on both sides, the dotted lines representing the lace on the other side.—*J. H. Miner in Wood-Worker.*

It is greatly regretted by the farmers around Jamestown, Dak., that the Northern Pacific Railroad will only distribute seed wheat eighty miles east of the Missouri River. While the crop there was not an entire failure, still there are a large number of farmers who will not be able to sow land already prepared unless they can obtain without cost the necessary seed. The impression seems to prevail with the railroad officials that the results of the drouth are wholly within their prescribed limits. This is not the case, as farmers along the Jamestown & Northern and in Stutsman county, have in many instances been as thoroughly burned out by the drouth as those living on the Missouri slope. Efforts will be made to present these facts before the officials of the road, and it is hoped their already liberal donation will be increased so as to furnish seed to these really needy farmers.

### A GRANGER VIEW OF THE TRANSPORTATION QUESTION.

The committee of the New York State Grange at the recent meeting at Canandaigua made a report to that body replete with good, sound, practical sense. Among other things the committee said the following:

"Public attention has at length been called to the danger of this growing power, and in several states railway commissioners have been appointed to bring the railway corporations of the country under the restraints of the law. A bill has also recently passed both houses of Congress and is now in the hands of the President for his signature, establishing a railroad commissioner to have supervision over the railroads passing through the several states. To make the work of these railroad commissions effective will require increasing watchfulness on the part of the people. Every artifice that ingenuity can devise or selfish greed can suggest will be resorted to to evade the enforcement of the law. The provision in the Interstate Commerce Bill which will be most strenuously resisted and evaded, is the clause providing that no higher rate shall be charged for a short than a long haul. It has long been the practice of the trunk-line roads to charge on local freight much more than the cost of the service to make up for the loss on carrying through freight. The injustice of this practice is too apparent to need argument. When the farm products of the West are carried to the seaboard at less rates than from points in our state, the effect is to reduce the farm lands of this state to the level of the lands of the West. The farmers of our state should insist that the short and long-haul provision of the Interstate Commerce Bill shall be strictly enforced.

"While much has been accomplished in bringing railroad corporations under the supervision of the law, there are two questions connected with this subject to which your committee desire to call the attention of the Grange. The first of these is publicity of freight rates. Under the present system of secrecy, it is within the power of any railroad to precipitate a war of rates to the serious disturbance of the business of the country. Prices of products fluctuate according as rates are put up or put down. Under such a system there can be no stability to the business of the country, but to a large degree it is governed and controlled by the caprice and greed of the managers of our railways. The second point to which your committee would call the attention of the Grange, and urge upon its consideration, is the importance of the waterways of the country as regulators of freight rates. 'The rate from San Francisco to New York is regulated and kept down by the ocean rate. The rate from Chicago to New York is regulated by the lakes and the Erie Canal. The rates from Chicago to the South are regulated by the Mississippi River.' No more conclusive argument can be advanced to prove the importance of our waterways as regulators of freight rates, than the fact that as soon as the Erie Canal is closed the railroads immediately raise their rates 20 to 25 per cent. over the rates charged during the time the canal is open. If another arrangement were needed to prove the power of the Erie to keep down the rates of freight, it would be found in attitude of the railroad managers toward the canal which has been that of opposition and hostility.

"Our neighbors across the lakes have shown a wisdom in this matter that we would do well to imitate. Their liberality to their waterways is rapidly diverting the transportation of grain and other products to their lines of communication and is building up the city of Montreal as a rival of New York. Grain can now be shipped from Chicago to Liverpool by the way of Montreal with only one transfer at Montreal, while south of the lakes at least two transfers must be made. If we would prevent the trade of the country from leaving our own state, it must be evident to every one that we must offer the same facilities for cheap and rapid transportation as are offered by our Canadian neighbors. We believe there is no more important subject now before producers and consumers alike, than the improvement and enlargement of our waterways to such a degree that they may serve as a regulator of freight rates, and prevent the railroads from practicing extortion in local rates as well as to prevent a diversion of that trade from our borders which has made New York the Empire state of the Union. The trifling tax which will be imposed on the farmers to accomplish this object will be much more than counterbalanced by the amount received from the large cities for the support of our common schools.



## THE "EUREKA" DUSTLESS CORN SHELLER.

The vertical corn sheller illustrated on this page, to which attention is invited, is the invention of Mr. Henry Lippold, who, at the time of its invention, was an expert workman in one of the mill-furnishing establishments at Silver Creek, N. Y. This was a number of years ago; and, although the "Eureka" possessed great merits which were conceded by all who knew the machine, it did not become very well known until its manufacture was undertaken some time ago by the Eureka Mfg. Co., of Corry, Pa., in connection with the building of engines, boilers, corn cleaners, etc. The machines were at once improved and made dustless, care being taken to preserve the features which years of experience had tested and proved acceptable.

On the first day of January, [1887, Messrs. Lippold & Heath purchased and succeeded to the business of the Eureka Mfg. Co., and they are now actively pushing the business. The first chief feature of the "Eureka" Dustless Corn Sheller is its case. It is formed of many sides, toothed, and the whole is broader one way than the other; or, in other words, it is elliptical in cross-section. Thus, instead of a rigid circular case, the twelve corners between these toothed sides form twelve places to ease the pressure on the corn and cobs, while the two sides of the ellipsis relieve the half of the cylinder. The case is cut in halves, which are held together by two clasps. These may be loosened in an instant without trouble, making everything ready for removal. The case is kept from revolving with the cylinder by two bolts loosely let into it on opposite sides, which allow it to move to and fro automatically to relieve the pressure. This ingenious arrangement and the free delivery around the entire base and directly downward have two effects. First, the corn seems literally to fall down through it, giving it wonderful capacity while doing perfect work. Second, it allows a great saving in power, amounting to at least 30 per cent. over the horizontal or rigid-case upright machine. Another important feature is the position of the suction fan, which is placed over the sieve and draws the air upward through it, acting similar to a blowing fan, thus working off many small pieces of cob that would be drawn down through with the suction if it were in the opposite direction. It will be seen that the engraving of the dustless corn sheller shows the machine to be nearly as broad as it is high, but when it is stated that the posts of the "Baby," or the 100-bushel size, are but 2 feet 11 inches in height, readers will be able to appreciate the neatness of the machine. The simplicity of the machine permits good construction at a moderate cost, so that the company can afford to sell fully as cheaply as any standard opponent. These shellers are driven from either the top or the bottom of the shaft, or with horizontal shaft, gears and loose pulleys from either the top or the bottom of the machine, as may be desired by the user. The accompanying illustration shows the dustless combined sheller and cleaner, and the elevator sheller without the cleaner is shown in our small engraving. The present snug cleaner is made and sold with the elevator shellers. The sizes range in capacity from 1,000 bushels in ten hours up to 18,000 bushels in the same time; and if there is any man in the world who dares to ask for more, Messrs Lippold & Heath promise that it shall be given him up to any amount for which he dares to pay. One important feature of the large shellers, to which attention is invited, is the saving of 30 per cent. of power for the same work, an economy that amounts to five times the cost of a sheller during the time it will wear. We bespeak for the company a liberal share of trade, and as they are anxious to submit their machines to trial, and guarantee to pay every dollar of expense if they do not perform as advertised, purchasers are safe in ordering from them. For further information address MESSRS. LIPPOLD & HEATH, at Corry, Pa.

With a view to encourage the production of No. 1 hard wheat the Manitoba & Northwestern Railway has issued a circular offering to supply farmers along the railway with choice seed wheat of the red fye variety at cost, free of freight charges.

## THE GRAIN TROUBLE AT DETROIT.

Detroit has been having a peck of trouble with her grain blockade, and the dissatisfaction of the grain men has been extreme.

"All trade is reciprocal," said Mr. R. W. Gillett, of Gillett & Hall, "and when we stop buying grain in Southern Indiana, for instance, we also stop selling dry goods, groceries, hardware, etc., in that part of the country. It is a common law of trade that a country from which a city draws most largely its supply of raw materials furnishes the chief market for its manufactured products. In the measure that such supply is curtailed or diverted into other channels, to that extent do the wholesale and

crippled. There is much talk of boulevard improvements, an exposition building and a mammoth hotel. Those are praiseworthy enterprises, but it seems to me that they should properly follow in the wake of necessary provision for the growing business of the city. To-day Detroit is the only city in the country that does not anticipate a growth in its grain trade by erecting storehouses to meet all possible emergencies."

"Extortionate switching charges, discrimination in freight tariff, lack of elevator room and cars are parts of one great imposition upon the business community of Detroit," said A. G. Ellair yesterday. "We are no nearer the seaboard as regards freight charges than points 300 miles west of us. But what can we do? We once took steps to correct the switching evil and sought the advice of learned lawyers, but the uncertainty of the law and the certainty that we would be involved in almost endless litigation if we undertook it, led us to abandon the proposed step. We are most shamefully treated by the railroads, and, as the *Tribune* said, we are debarred from either buying or selling. If we had all the elevator capacity required the temporary dearth of cars would not cause us very much embarrassment. We want fully double the amount of room we now have."

"The grain business of Detroit has been seriously crippled through lack of elevator room," said President Lichtenberg, of the Board of Trade, "and other business has suffered to a more or less extent in consequence. Our mail is full of letters from correspondents who cry that they have grain which they would like to ship to Detroit, but are prevented by the blockade. Cars billed to Detroit and loaded with grain are sidetracked on every road leading to Detroit. It is growing from bad to worse. If the railroad companies will go to work and build more elevators at once, much of the business which is now being lost can be regained. If it is deferred much longer we will find our grain business going back."

"The railroads are not giving Detroit dealers a fair show by any means," said W. A. Waldron, of Sherman, Waldron & Co. "If we could see any light ahead we would not murmur, but the trouble is growing steadily worse. The elevators cannot take any more grain, and it is next to impossible to get cars. We can only get a car loaded by going down on the tracks and raising a row. We are constantly receiving orders from the East which we are unable to fill."

"Now look at this," said Mr. Waldron, exhibiting a letter. "Here is an order from a

Boston firm for a large shipment of corn. We can't fill it, for it might be weeks before we could get the cars started. It is disappointing because we can put corn down in Boston at a good profit."

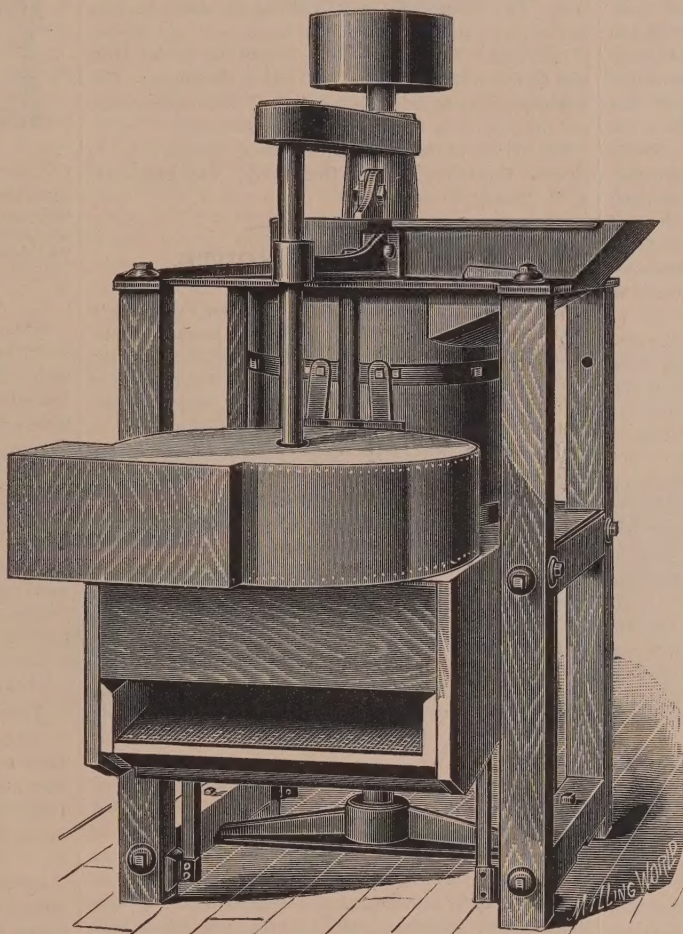
Jas. W. Flynn said: "It is a disheartening state of affairs. Our correspondents have almost ceased writing and are now shipping to other points. When the Wabash was built to Detroit we put forth strong efforts to build up a large trade and succeeded admirably. Shippers are now going to Toledo, where there is enough enterprise among the elevator people to keep pace with the growth of the city's trade. We want just twice the amount of elevator room that we have at present."

R. F. Muller, of Muller & Worcester.—"We are completely handicapped, both as regards receipts and shipments. We can neither buy nor sell. With the new addition to the D., G. H. & M. elevator we will still lack 50 per cent of the necessary elevator room in Detroit."

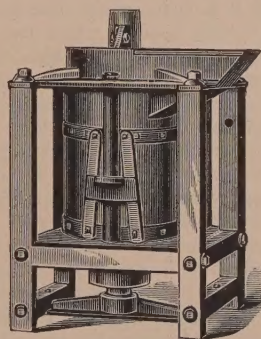
J. S. Lapham & Co.—"The railroads certainly have not treated Detroit grain dealers right. They have made promises without number that everything would be all right and that we would have an outlet to the East soon, but these have come to naught. We have been trying to make shipments for four weeks without success. When this is added to the elevator difficulty the situation of the grain dealers is not an enviable one."

A. C. Raymond.—"Our treatment by the railroads is shameful, and no other word fittingly describes it. The actual loss in dollars and cents resulting from the confusion in which inadequate elevator and transportation facilities have involved us is very large."

"If the weather should get warm and the ice in the river soften sufficiently to permit the shifting of vessels



THE EUREKA DUSTLESS CORN SHELLER.



THE EUREKA ELEVATOR SHELLER.

jobbing interests of the city suffer in a diminished business.

"I am inclined to think that the public scarcely appreciate the extent that common interests suffer through this great injury to Detroit's grain trade. When I meet a leading wholesale dry-goods dealer on the street he stops me with an inquiry as to the prospects for a good crop of wheat; whether prices will be good, and if there will be a ready market. If I can assure him that these are the features of the outlook he will invest more heavily in goods, feeling confident that collections will be easy and the demand good. But how will he regard the situation if he is told that interior shippers are marketing their grain in Toledo or that they can't get it to market at all on account of the great blockade in Detroit?"

"The lack of elevator room is a public evil, and should be remedied before the grain business is permanently



we can get some temporary relief," said C. W. Norton. "We already have nearly 800,000 bushels of wheat stored in boats, but there is considerable more vessel capacity in harbor which can be secured to help out."

Adverting to this subject the *Detroit Tribune* says: "The developments made by *The Tribune* during the past week in regard to the grain blockade at Detroit must have astonished many of its readers. The bare statements unsupported by figures and names of reliable business men, would have seemed incredible. One of the most remarkable features is the patience and non-complaining nature of the sufferers; since, but for newspaper effort the evils might never have been heard of outside of the various counting rooms. A reason for the silence may be traced to the sufferers getting used to it, because such troubles are no new thing in Detroit. But it is difficult to get used to hanging, as one man in history is said to have demonstrated. Business in a large city which represents the focussed interests of a great state, and partially that of surrounding states, cannot, or should not, suffer in the manner which *The Tribune* reports have shown. When a single firm in eight or ten weeks had an accumulation of 400 carloads of grain, unable to be moved, through want of elevator facilities and scarcity of cars, the evil amounts to a calamity affecting many others beside the firm of shippers. The people at large should be made acquainted with such facts and their interference would be justifiable.

"But it is unnecessary to further rehearse these wrongs. What the grain dealers want is some assurance that steps will be taken to render such troubles improbable in the future. No one, however, knows of steps in this direction being taken. The increase of size in one private elevator, which has to do duty for three lines of railroad, will not help matters much. Michigan is constantly breaking up fresh land and adding to the aggregate of its wheat production. In a favorable year it has raised 35,000,000 bushels of wheat, and as the prospects for the coming crop so far have been of the best, it will not be surprising if the state next fall harvests 40,000,000 bushels of wheat. The last crop was only about 25,000,000 bushels. Besides, Detroit is yearly reaching further into other states for cereals, and in corn alone might easily double or even quadruple its present business in that respect were proper handling facilities locally available. These facts and probabilities demonstrate the pressing necessity for from 25 to 50 per cent more elevator room before the year 1888. That the property would pay, it may not be able to prove in a newspaper column, but it is well known that in other cities where the elevating capacity is 50 to 100 per cent larger in proportion to size than in Detroit the property is understood to be a first-class investment.

"If we understand the feeling among Detroit Board of Trade members, they have no desire or intention to try to force the railroad companies to build more elevators. But they one and all claim that the railroads are under moral obligation to do so. Private parties, we have shown, are debarred from building elevators in Detroit. In no state have railroad corporations been more favored than in Michigan. These favors need not be enumerated. In these matters the rule should be, give and take, in something like equitable proportion. The railroads are inflicting untold damages yearly, not only on Detroit, but on the whole of the state, from whom so many favors have been received and from whom more may yet be demanded. We are not aware that a railroad corporation here has yet expressed sympathy in regard to existing troubles or made a promise for the future. They seem under the circumstances indifferent, as much as saying 'what are you going to do about it?'"

## NEW ELEVATORS AT DULUTH.

Following close upon the publication of the articles of incorporation of the "Duluth Elevator Company," which appeared in this paper yesterday, is the signing of contracts for the building of the elevators. A *News* reporter found J. T. Moulton, of Chicago, busily engaged yesterday in looking up lumber dealers and iron men and buying material for the new elevators. Contracts for the construction of an 800,000-bushel elevator and a 2,000,000-bushel annex, both to be completed by October of this year, were signed in St. Paul Thursday immediately after the election of the officers of the company. An option was also signed by Moulton & Son for the construction of a 2,000,000-bushel receiving elevator, which they are to build, if notified to do so, before Oct. 1, the whole making a total capacity of 4,800,000 bushels which the firm may be

called upon to put up. They have already bought 5,000 kegs of nails, and are negotiating with the various lumber firms at Duluth and along the Omaha and St. Paul & Duluth Roads for timber, no less than 7,000,000 feet being required for the two houses already contracted. They are also getting pile drivers and other machinery together, for a considerable part of which they are obliged to go to Chicago. Ladder rods and sheet iron have been purchased, and the Duluth Boiler Works, of McGregor & Harrington, will make the thirty elevator tanks needed.

The elevators will be located on ground belonging to the Omaha Road, about 300 feet east of the West Superior end of the Northern Pacific bridge. The elevator will stand out in the water, and the annex entirely on land. The elevator will be 227x84 feet in size, with bins 60 feet deep; an engine and boiler house will add 90 feet to its length. The annex will be 540x88 feet in size, with bins 55 feet at the eaves and 67 feet at the center. The machinery is to be driven by engines of 700-horse power, and the cost of the two houses is to be \$350,000.

The officers of the new company are as follows: A. J. Sawyer, President; W. H. Dunwoody, Vice-President; F. H. Peavey, Treasurer.

## A NEW GRAIN ROUTE.

Managers of the western trunk lines are exhibiting a tendency to encourage the building of markets on the Mississippi River instead of endeavoring to shove the grain product to the Atlantic seaboard. Operation and enforcement of the Interstate Commerce Bill will promote the interests of the grain markets on the river, as grain destined for export may be more cheaply transported to Europe via New Orleans than by crossing the continent. At one time in the history of navigation, and that was but a few years ago, it was thought that the barge system of transporting grain to the gulf would become an extensive business, but it has not attained the magnitude anticipated, more especially on the upper Mississippi, though south of St. Louis it has proved fairly remunerative as a business enterprise. During the past month or two the grain shipments via water have been larger than at any previous time, and this fact is occasioning no little comment in transportation circles. In confirmation of this a St. Louis paper recently published the following:

The recent large shipments of grain and provisions for export from western and northwestern points which have not passed through the natural channel, by way of St. Louis, have occasioned considerable discussion in commercial and transportation circles, as to the probable meaning and the actual cause of the movement. During the past week immense quantities of export wheat have been taken to Cairo by the Illinois Central, there to be loaded in barges, while on Saturday last 700 cars of corn were inspected at Belmont, on the Iron Mountain, with 300 cars more in sight, none of which had been seen in the customary territory through which it should pass. This large movement of grain and the discussion of it brought out the fact that of late a number of heavy shipments of provisions have been made from Omaha to Memphis, also a new feature in transportation from that section. As to the grain shipments it is claimed that the present low stage of water and ice obstruction in the Mississippi has precluded the possibility of bringing the grain to St. Louis and transferring it to barges here, and that there is, therefore, no especial significance in the fact unless the movement continue after the reopening of navigation on the river from this point. It is even urged that it would be preferable to start the barges from St. Paul, when there is sufficient water to float them, than to carry the grain to Cairo or to Belmont for transfer to the waterways at the points named. That the shipments are unusually large, in fact unprecedented, is admitted, but the permanency of such movement is not regarded as among the probabilities. The shipment of provisions from Omaha to Memphis are natural enough, the Nettleton system doing the work.

Formerly Keokuk was of more importance as a grain market than it is at present, and following the natural laws of commerce should this new method of shipment become permanent and increase in magnitude it will be of benefit and develop the grain business here. Increased traffic on the river alone would give us much advantage. Being situated at the head of deep-water navigation in certain seasons of the year, large quantities of grain might be shipped to Keokuk by rail to be forwarded from here to St. Louis. Chicago is viewing with alarm this

gradual divergence of the grain traffic, and elevator property in that city is said to have greatly depreciated. A system has been perfected for elevating grain from the barges to the ships at New Orleans, and the traffic seems to be gradually growing, having recently received an unexpected impetus as stated above. If the hope now entertained is realized, it will not only benefit Keokuk, but every city on the river. The superiority and cheapness of the route and the operation of the Interstate Commerce Bill may bring about the result expected and desired.—*Keokuk Gate City.*



[We invite correspondence from every one in any way interested in the grain trade, on all topics connected therewith. We wish to see a general exchange of opinion on all subjects which pertain to the interests of the trade at large, or any branch of it.]

## A CHANGE AND IMPROVEMENTS.

*Editor American Elevator and Grain Trade:*—Messrs. E. T. Archibald & Co., of Dundas, Minn., recently sold their elevator at Rosemount, Minn., to Mr. A. Rieger, of Vermillion, Minn. Mr. Rieger is putting in a Willford three-roller feed mill and a Victor Corn Sheller and Cleaner. J. S. Danens, formerly agent for Messrs. Archibald & Co., remains with Mr. Rieger.

Yours,

\* \* \*

## IS IT PRACTICABLE?

*Editor American Elevator and Grain Trade:*—We would ask you if it is practicable to build an elevator 105 feet from track, convey grain from cars to elevator, and spout from top of elevator to cars?

Yours truly, KNOXVILLE CITY MILLS CO.  
Knoxville, Tenn.

[There is no reason why this might not be done, if properly planned and executed. We know of one instance where wheat was conveyed a distance of 340 feet by conveyor, and then spouted into boats in the river. Other instances of shorter distances are numerous.—Ed.]

## FROM NEBRASKA.

*Editor American Elevator and Grain Trade:*—On returning home the other day, after an absence of several weeks, I found that the AMERICAN ELEVATOR AND GRAIN TRADE for January had not been received here. Please send it to me. I think too much of the paper to miss a number, if I can help it.

I wrote you some time ago that the jobs I then spoke of would finish up our elevator work for this winter, but it is not so. I go in a few days to Hardy, Neb., to take out the entire inside work and machinery of Gregg & Kyser's steam elevator, and replace the same with new cleaning machines, elevators, conveyors, etc., and also construct bins, etc. So the winter's work will 'linger in the lap of spring,' and from the present outlook there will be no end to it.

Yours truly, J. A. CAMPBELL.  
Lincoln, Neb.

## ELEVATOR PLAN WANTED.

*Editor American Elevator and Grain Trade:*—I inclose subscription to the AMERICAN ELEVATOR AND GRAIN TRADE, commencing with the January number. Also, if you have any back number giving plan of a small, cheap elevator, of two stories, with capacity of about 5,000 bushels on second floor, will you please send it to me. I have written to several architects, but they are all out of elevator planning. I now have a copy of your paper for January, 1886, containing a fine plan, but it is too extensive and too expensive for me, and has no ground floor. I want to put up a building that will serve my purpose, about 24x30, and want to put it up as cheap as possible. I seldom buy to exceed 400 bushels per day, and handle mostly wheat and oats.

Very truly, C. C. HITCHCOCK.  
Flat Rock, Wayne Co., Mich.

[No such plan as our correspondent wishes has been published in this paper. Perhaps some of our readers and patrons can help him out.]



## THE CONSTRUCTION AND EQUIPMENT OF ELEVATORS.

I know it is sometimes considered troublesome to get a sheller pit well aired and lighted, still it can be fairly well done in all places where proper precaution is taken in planning and laying out the work at the commencement.

It will be money in the pocket of any grain man contemplating the erection of an elevator, to have some good mechanic, who is well known as an expert at the business, make him a set of plans and specifications, and afterward compel whoever does his work to adhere strictly to plans and specifications. In that way few mistakes will be made, and a good and satisfactory job assured.

I am led to give this advice because of there being so many men scattered over the country who, while claiming to be good mechanics and competent to plan and construct elevators, really have not the necessary knowledge and skill to build a respectable woodhouse. The consequences of such oversight always are numerous mistakes that are invariably expensive during the process of construction, and when completed, or pronounced so, you have an elevator so awkward, so dark, dismal and inconvenient that it is forever afterwards an annoyance, trouble and expense. Don't do anything of the kind, ye men who have elevators to build, but go at it intelligently and see that everybody that works at it works intelligently. No man or set of men going to build a cotton mill, woolen mill, paper mill, saw mill, or even a good flour mill, ever experiment in that way. All of them, except the flour-mill men, who sometimes get bitten, go at it intelligently by first employing men of known ability, and get good jobs in all cases.

The discharge from the sheller into the leg of the elevator should be broad, ample and steep, so as to avoid clogs and chokes, and should enter the elevator on the lifting side and above the center of the boot pulley, so that the cups can catch it as it drops and before it reaches the bottom of the boot. Unlike loose grain, cobs form a very bad material to be scooped up by the buckets from the bottom of the boot. The fact is they won't be scooped in that way to any great extent. For common-sized country elevators the boot pulley need not be over 16 inches in diameter, consequently will not have to extend so far below the bottom of the sheller. With sheller and elevator leg set in proper relation to each other, three and a half to four feet will be long enough for boot to run below the sheller. The sheller should be set crosswise of the up leg of the elevator, and the grain thus spouted into it in the shape of a hopper from any direction.

Sometimes elevator men, in order to economize in machinery, desire to put in but one stand of elevators and expect to handle and elevate all kinds of grain by that one. The best plan to pursue in such cases is to spout under the shelling cylinder into the boot of the elevator. It is, however, not very good economy to try to get along with one stand of elevators, because loose grain and ear corn may both be coming in very rapidly at the same time, when shelling has to be stopped in order to get up the loose grain, or the reverse. In either case it occasions loss of time both to the elevator and its customers. Loose corn can of course be dumped with the ear corn, and all go up together, but not so with loose wheat, oats, or barley.

Boots that have to go so far down in the ground ought to be made of iron and adjustable with hand screws on each side to raise and lower the pulley in keeping the belt taut. Light wrought-iron boots answer the purpose very well, but for good staying qualities a heavy cast-iron boot is much superior.

The head pulleys for a stand of elevators not exceeding 65 feet in height need not be over 36 inches in diameter, nor for any other height except for increasing lifting capacity. The number of revolutions for a 36-inch elevator pulley for raising corn and cobs should have about 38 revolutions per minute. It is found to discharge better at that speed. For loose grain, up to 40 revolutions will do no harm.

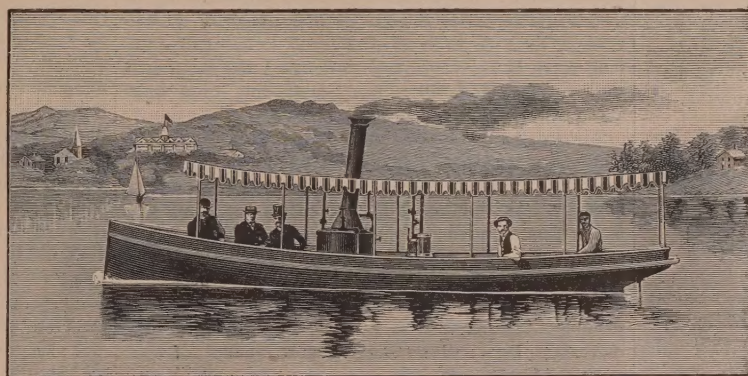
There is a prevailing notion that most any kind of a belt will do for elevators, but that is a mistake. The elevator belt should be first-class, and not a cheap belt by any means; in fact, the best grade made. For all grain-elevating purposes good rubber belting should be used. The

dust and general dryness is too severe on leather. There should be one bucket for every sixteen inches of belting. For a sheller having a capacity of not over 300 bushels per hour, use 11x7 buckets; for 500 bushels per hour, use 13x7 buckets; for 800 bushels per hour, use 16x7 buckets; and for 1,000 bushels per hour, 18x7 buckets. Buckets for handling corn from the sheller should be of very heavy material, as corn is very severe on the buckets and wears them out rapidly. There should be at least one and a half inches clearance between the cup and front of elevator leg; two inches would do no harm; cobs can not then get caught between cups and wood.—*R. James Abernethy, in Modern Miller.*

## SMALL STEAM YACHTS.

The many advantages which small steam yachts possess over sailing yachts, for pleasure and business purposes, have resulted in the growing popularity of small steam craft.

It seems needless to enumerate the purposes for which small steamers of this kind can be used; but we might mention their use on lakes and rivers for pleasure purposes, and for the transportation of mails in districts where roads are very bad, or actually impassable, at many seasons of the year; also for ferry boats or for carrying fishing and hunting parties on lakes and rivers to fishing or hunting grounds, and particularly for towing barges



THE STEAM LAUNCH JUNO.

laden with lumber, salt, coal, stone or other products of the country, on lakes, rivers or canals. The uses to which such a boat can be put are greater than we can name here, and when once generally known, they will find an introduction to all the small lakes and navigable streams in the country. As at present built they are so simple and easily managed that any person of ordinary intelligence can use one of them, and one man alone can fire and run one of our 30 or 33-foot boats without any assistance, provided the steering wheel is placed near the engine.

The steam launch "Juno," of which we give an illustration, is a type of these little vessels, of which Chas. P. Willard & Co., 282 Michigan St., Chicago, build a great many, and will send description and price upon application from any of our readers.

## STORAGE ROOM AT DULUTH.

The present storage room at Duluth is as follows:

Elevator.	Bushels.
Union Imp. & Elev. Co., Elevator "E".....	800,000
Union Imp. & Elev. Co., Elevator "F".....	1,500,000
Union Imp. & Elev. Co., warehouse No. 2.....	650,000
Union Imp. & Elev. Co., warehouse No. 3.....	650,000
L. S. Elevator Co., Elevator "B".....	1,000,000
L. S. Elevator Co., Elevator "C".....	1,100,000
L. S. Elevator Co., Elevator "D".....	1,200,000
L. S. Elevator Co., Elevator "G".....	1,750,000
L. S. Elevator Co., warehouse No. 1.....	750,000
Great Northern Elevator.....	1,750,000
Cutler & Gilbert's warehouse, temporary.....	150,000
Total.....	11,250,000
Total Jan. 1, 1885.....	9,710,000

There was destroyed in the fire of Nov. 27 elevator capacity of 1,560,000 bushels, yet the increase over a year ago is 1,540,000 bushels or the capacity of a large elevator. They are now building Elevator "H" for the Union Improvement & Elevator Co., and Elevator "J" for the Lake Superior Company, while the latter company will also probably begin in the spring the construction of Elevator "I." Each of these houses will have a capacity of 1,500,000 bushels. There are also two new companies forming, of which *Daily Trade* is not yet at liberty to give

full particulars. These two companies, both of which are very strong financially, will probably build at least 6,000,000 bushels' capacity before Jan. 1, 1888, so that during the coming year Duluth's elevator capacity will just about double.—*Daily Trade.*

## BUCKET SHOPS AND LOW PRICES.

It is estimated that during 1885 and 1886 the "bucket shops" of the United States had constantly placed in their hands orders to buy 50,000,000 bushels of wheat. Had these orders gone to their natural markets for execution they would irresistibly have advanced values, and the ruling quotations of our great cereal would in these years undoubtedly have been from 10 to 15 cents per bushel higher. The salable value of every acre of wheat harvested in Missouri would have been from \$1.50 to \$4 greater at the very thrasher. The "bucket shops" caused this enormous loss to the producer.

The "bucket shop," like the lottery and the faro-bank, finds its sole profits in its customers' loss. If its patrons "buy" wheat and wheat goes up, the "bucket-shop" loses. And so, like any other professional gambler, the "bucket shop" takes the money intrusted to it by those who played against its game, and, entering the markets of the country, used this tremendous financial engine to force prices downward by every available means. It was not a hard task to keep a market down which had lost its natural support—that of the very men whose money the "bucket-shop" was using. The game goes on. A magnificent reward furnishes a constant incentive to these piratical craft to act together in manipulating the markets in a manner hostile to the interests of the producer.

It is not wholly coincidence that the average price of wheat has declined for five years almost proportionately with the spread of the "bucket-shop" system. Other causes have aided the depression, but who can deny that the withdrawal from the market of a vast supporting element and the entrance upon it of a powerful monied combination interested in the decline of prices has not been an effective instrument in the loss of the grower and the impoverishment of the buyer?

Chicago is the leading speculative market of the world, and the tendency of prices there is reflected and followed both at our seaboard and in the grain centers abroad. London and Liverpool watch the Chicago market with the most careful attention, and advance or depress their bids for American wheat in sympathy with the course of prices at our great grain center.

With a Chicago man perfectly unhampered by the adverse manipulation of the professional bears, among whom the "bucket-shop" influence is the most powerful, we should at once witness the effects of higher values there in an enhancement of the average export price.

The average export value of wheat, which is the true basis of value, was for the fiscal years named, at New York, as follows: 1881-82, \$1.22½; 1882-83, \$1.18½; 1883-84, \$1.13½; 1884-85, 94¢; 1885-6, 93½¢; 1886 (six months), 91¢.

It is easy to see how naturally it follows that the "bucket shop" arrays itself against the interest of the producer, when, having diverted this vast volume of trade from its accustomed and natural channels, it seeks to depress prices for its own gain. The patronage of the "shop" being in the main a gainer by advancing values, the laws of self-interest compel the "shop" to exert all of its power as a wrecker of values. Incidentally the innocent suffer. The great markets, unsupported, topple and go head downward. After them are dragged the farm values of grain upon every acre in the country. If there had not been a "bucket shop" in the United States the farmers of Missouri would have sold their last wheat crop alone for \$1,235,000 more than they did get for it, and this is a fair and moderate estimate.—*C. C. Christie.*

In the Missouri Legislature a bill has been introduced providing for the creation of a board of railroad and warehouse commissioners, who shall appoint a grain inspector for a term of four years, all warehouses and elevators with a minimum capacity of 25,000 bushels to be licensed by the circuit court of the county, or, if in St. Louis, by the circuit court of the city, the license to give the name of person; or, if a corporation, of its officers, managers, etc.





The Roller Chain Belting Co., of Columbus, Ohio, report a good business, running full, and have orders ahead to keep them busy for some time. Their special carrier chain is proving very satisfactory, and the outlook is encouraging.

The Robert Aitchison Perforated Metal Co., of this city, have closed contracts with J. E. Smith, of Shiloh, Ohio, and C. & G. Cooper & Co., of Mount Vernon, Ohio, for their season's supply of perforated metals.

Edw. P. Allis & Co.'s new foundry, which will replace the old one burned the past month, will be a model institution. It will be 400 feet long by 128 feet wide. By a system of traveling cranes, operated by power, nearly every foot of floor surface of the vast establishment will be available for heavy work, if so desired. These cranes will be from 15 to 25 tons; and in every possible respect the foundry will be complete.

It is flattering to get a letter like the following, which was recently shown us: "Mr. Geo. J. Fritz, Central Iron Works, St. Louis.—Dear Sir:—We have your No. 2 'Doctor' at work, and 'she is a daisy,' and don't you forget it. She works like a charm, keeps the water up in the boiler, and we run her only 26 revolutions per minute, hardly fast enough to carry her over the center. Inclosed find draft to balance our account. Yours truly, J. B. Stewart & Co., Merchant Millers, Rushville, Ill."

Mr. G. F. Prescott, of Sleepy Eye, Minn., has taken out a patent on a cockle and grain separator which comprises a frame, a hopper at the top, a grain wheel compartment, having an inclined bottom, a cylindrical screen located within the frame below the compartment and inclined in reverse direction to the bottom, a fender secured to said bottom around the outlet opening and closing the open inner end of the screen, being journaled to the side of the frame, and a slide, adjustably fitted directly to the outside of the frame and forming the journal bearing for the outer end of the screen shaft.

D. Kuhlman, of Atchison, Kan., has taken out a patent covering some new and valuable improvements on the Kuhlman Automatic Scale. The purposes sought in this supplementary patent are to provide novel means for cutting off the flow of grain to the grain-weighting bucket when the quantity therein overbalances the scale beam, and is discharged from the bucket into a secondary movable hopper thereunder; to provide a guard or shield for the cut-off, whereby the pressure of grain is relieved therefrom, and it is thereby permitted to operate perfectly without being interfered with by the pressure of the flowing grain; to provide novel feed-controlling valves for partially or nearly stopping the flow of grain, as the quantity in the grain-weighting bucket is nearly sufficient to overbalance the scale beam, and to provide novel locking devices for holding the swinging partition in the grain bucket at either side to which it is swung by the discharging grain.

### THE OMAHA ELEVATOR AND GRAIN CO.

This company, proprietors of the mammoth elevator at Council Bluffs transfer, report active business through the entire season. They have handled 7,580 cars of corn, 1,312 cars of wheat, 1,040 cars of oats, 126 cars of rye, 232 cars of barley, 180 cars of flaxseed, making a total of over 6,000,000 bushels of grain. The storage capacity of their elevator is 1,000,000 bushels, with facilities for handling 300 cars per day. It will be seen that they are prepared to handle more than twice as much grain as now received by all the railroads centering here. With Nebraska's present ratio of increase continued in the next five years they expect to be receiving the full handling capacity of their elevator, 300 cars per day. Three-fourths of the independent grain dealers on the Union Pacific system in our state are their patrons, a fact which speaks for itself. The managing officers of the company are: President, H. W. Rogers, and Vice-President, D. S. Barriger.

The exports of wheat from San Francisco from July 1 to Feb. 1 were 15,475,870 bushels, against 5,124,531 bushels the same time in 1885-'86.

### TRADE AT PHILADELPHIA.

PHILADELPHIA, Feb. 9, 1887.

*Editor American Elevator and Grain Trade:*—

The unfavorable weather and unsettled labor troubles has depressed and somewhat unsettled business. The commercial situation can scarcely be said to have accomplished much in the way of progressive improvement during the last month, because the markets for all leading staples have remained quiet, and the character of the buying is confined rather to the filling up of gaps, than to a general stocking up to meet the demands of a new campaign. Speculative trading is also in a waiting attitude, and a very quiet feeling has prevailed upon the produce market. Dealers have hesitated because of the strikes, the unsettled feeling in Europe, and the uncertainty that seems still to hang around the Inter-State Commerce Bill; operators in grain are afraid of the increasing visible supply that a free movement at the West is accumulating, together with the absence of an active export demand, and a disturbed market in England and on the Continent; the cotton market is under much the same influence; the dullness of petroleum is in consequence of a lack of new features in the statistical position of production, and the coffee market is patiently "waiting for something to turn up" that will stimulate trading, either for higher or lower prices.

Prices of wheat have been somewhat irregular, but the general temper of speculation has been bullish, owing to the uncertainty of the foreign political situation. At the close on Tuesday prices were about  $\frac{1}{4}$ c. higher than at the time of our last review. Export demand has continued very moderate, and millers have bought only for immediate wants.

For corn the market has ruled strong, under light offerings and a fair demand, both for export and local consumption. There has been very little speculative trading, however. At the close on Tuesday prices were  $\frac{1}{4}$  and  $\frac{1}{2}$ c. higher than at the time of our last report.

The oats market has been quiet, and prices have ruled a shade easier under more liberal offerings.

The statistics of the receipts of flour, wheat and corn at the four leading American ports for the year 1886 show that while there was a falling off in the receipts of corn of about 10,300,000 bushels, as compared with the previous year, the receipts of wheat were larger by about 25,600,000 bushels than in 1885, the flour receipts also showing an increase of 200,000 barrels. Following are the figures:

	Flour, bbls.	Wheat, bu.	Corn, bu.
New York.....	5,580,498	41,546,610	32,789,951
Boston.....	3,547,522	2,783,226	8,687,908
Philadelphia.....	928,593	7,539,331	4,104,148
Baltimore.....	1,961,832	12,348,926	14,991,150
Total 1886.....	12,018,445	64,218,094	60,573,457
Total 1885.....	11,818,934	38,564,004	70,945,156
Increase or decrease.....	*199,511	*25,654,090	+10,371,699

It will surprise a good many people to learn that the aggregate of the receipts here shown is the largest of any year since 1881. As compared with that year, however, and with each of the three years preceding, viz., 1878, 1879, and 1880, they show very heavy falling off. The following shows the total receipts in each of the ten years ending with 1886, and the percentage of the total received at each of the four ports, flour being reduced to bushels:

Year.	Total Receipts. Four ports, bu.			
1877.....	149,189,220			
1878.....	230,952,753			
1879.....	273,811,455			
1880.....	280,529,209			
1881.....	216,960,530			
1882.....	155,114,273			
1883.....	173,668,304			
1884.....	155,853,882			
1885.....	162,694,364			
1886.....	178,874,554			

Percentage of each port of total receipts:				
New York.	Boston.	Philadelphia.	Baltimore.	
51.2	12.0	14.2	22.6	
53.5	9.5	17.3	19.7	
51.9	10.0	15.4	23.7	
51.7	11.5	15.8	21.0	
53.5	13.9	13.3	19.3	
56.9	15.4	9.9	17.8	
52.5	17.6	10.3	19.6	
53.6	17.9	9.1	19.4	
55.0	13.9	10.7	19.4	
55.6	15.3	8.9	20.2	

Here some curious facts are discovered. The percentage of the total received at New York during last year, although only a shade above that of 1885, is larger than in any other year except 1882. The proportion of the total reaching Boston shows a greater variation, though as between 1886 and 1885 it shows almost exactly the same relative increase as New York. Philadelphia, on the

other hand, received a smaller percentage in 1886 than any other year. The following compares the combined per cents. of the two northern and the two southern ports for the ten years.

	1886.	1885.	1884.	1883.	1882.
New York and Boston.....	70.9	69.9	70.5	70.1	72.3
Philadelphia and Baltimore.....	29.1	30.1	28.5	29.9	27.7

	1881.	1880.	1879.	1878.	1877.
New York and Boston.....	67.4	63.2	60.9	63.0	63.2
Philadelphia and Baltimore.....	32.5	36.8	39.1	37.0	36.8

The annual meeting of the Commercial Exchange was held on Tuesday, the 25th ult. The annual report of the directors in reference to the grain and flour trade is as follows:

"In fact we already have substantial evidence of the improving tendency in the enlarged business in wheat at this and other ports. Our receipts of this cereal have increased from a total of 4,140,012 bushels in 1885 to 6,289,641 bushels last year. This improvement is a fair percentage of the wheat export business of the entire country, which has been approximately double what it was in the preceding year. The change for the better is due, as above indicated, to less favorable crop conditions in other countries, and to the comparative cheapness of the grain throughout the world. The price of wheat has averaged lower in this country than in 1885, though a little higher than in 1884. It is highly creditable to the inspection system of this port, and to the intelligent and earnest labors of the Grain Committee of the Commercial Exchange, that the range of prices in the market, especially for the higher grades of wheat, has compared favorably with that of other markets, and that the deservedly high reputation of Philadelphia cargoes in foreign markets has been unimpaired throughout the year. The country exports of corn, which are always an inconsiderable percentage of the total yield, show a marked falling off, and Philadelphia participates in the general shrinkage of business in this cereal by a decline from 6,115,001 bushels, cleared from her docks in 1885, to a total of less than 2,000,000 bushels exported the past year. The decline is relatively greater than at other Atlantic ports, but is confined exclusively to our export business, the volume of local traffic remaining about the same as in previous years. The changes in the statistics of other grains are comparatively unimportant. The significant feature of the general exhibit is the failure of the grain trade to keep pace with the growth of other commercial interests of the port, nor does it reach what would seem to be the measure of our opportunity. We have advantages of geographical position that should count for better results. Our terminal facilities are equal to the needs of more than three times the business that in recent years has fallen to the share of this port. In fact, the records of this Exchange show a much larger business completed in former years under less favorable auspices. In the item of flour our receipts declined from 1,369,732 barrels 1885 to 931,758 barrels in 1886, showing an apparent loss of 138,000 barrels in the volume of business in this product. This decrease is not due, however, to any decline in the business of local receivers. It is attributable to the fact that a smaller proportion of the through shipments of flour from the West to foreign ports has been handled at this port. As this change in the current of our export trade has arisen from temporary conditions of the market for through freight more favorable to other ports, and we believe by the temporary withdrawal of a number of our regular steamers from Liverpool and other English ports, owing to unremunerative freight rates, it is a matter of no significance as an indication of any unfavorable tendency in the flour trade. With the increased terminal facilities that have been recently made available to the trade, and more remunerative ocean freight rates, there is every reason to look for a more satisfactory exhibit at the close of another year."

Rumors of impending war in Europe have been utilized, and in some cases no doubt were originated by speculators in grain and stocks for the purpose of advancing prices of the one, or depressing the other. No man can tell what a day may bring forth, and it is manifest that the conditions of a great struggle exist, the provocation of which may occur at any moment. In the meantime such strength as the wheat market has of late displayed is due to the large present and prospective demand for breadstuffs in England and on the Continent, arising from the unfavorable harvests or reduced acreage of the season of 1886. It is calculated that the United Kingdom alone will require about 90,000,000 bushels of wheat (including flour) to be imported in the period beginning Jan. 15 and ending Aug. 31, 1887. This, with the Continental de-



mand, will probably absorb the surplus of wheat in this country available for export. The visible supply is still, however, over 60,000,000 bushels, and decreases very gradually.

Abraham Fultz, the discoverer of the Fultz wheat, is living in the Juniata Valley, near Allensville, Mifflin Co., Pa. It is proposed that every farmer who is now raising that wheat should give him the value of one bushel, as he has never received a cent for his discovery. If Mr. Fultz is in need, the scheme may be a success; but the growers of Fultz wheat would first like to know whether he is, or not.

They raise two bushels of corn now in the Southern states where they raised one bushel in 1870. Perhaps there is no better measure of the Southern advance in thrift and prosperity than the self-sustaining improvement indicated by the corn crop. Corn is the farmer's gold mine and the mainstay of the nation.

The market for grain freights is dull and weak, with liberal offerings of tonnage. We quote at 3s. 3d. and 3s. 6d. for steamers for Cork for orders, and direct Continent, and at 4½d. for freight room in regular line Liverpool steamers. No room offering for Antwerp.

J. C. D.

### FLOOR GRANARIES.

A sensible article upon the subject of granaries, and written by G. Luther, has lately appeared in pamphlet form, from which the following is taken: An ordinary warehouse, having five or six floors, with few or no middle partitions, so that the whole floor can be used for storing grain in heaps of moderate depth, is called in Germany a "floor granary." Most of the European grain warehouses are built in this style. Handling the grain in sacks is preferred, as it often happens that these granaries are used for other purposes. The grain is shot down on the floor, and heaps formed, which are separated by gangways. The depth of these heaps (or beds) varies from three to four feet; in Russia six feet. The only means of preserving the grain is by a current of air passing over the grain heaps. It is therefore necessary to provide such buildings with as many windows as possible, in order to insure a permanent draught. The stored grain, especially when wet, has to be frequently turned, which is only practicable by the employment of hand labor. The great drawback to this system of granaries consists in the expense involved in the employment of this manual labor, not only for the turning of the grain, as previously mentioned, but also for shoveling to and from the elevators or traveling bands, when being stored or removed. In order to economize expense in this respect, an arrangement has been adopted in which the floors consist of a series of hoppers. The advantages of storing in warehouses of the latter description are, however, dearly bought, as a simple calculation will readily prove the difference between the space generally utilized and that which ought to be utilized. Take, for instance, the area of a building 100 feet by 50 feet; with six floors, each floor 10 feet high, in which the grain is stored in heaps of four feet in height. The cubic area of a warehouse of these dimensions would be, with an allowance of 25 per cent. for gangways, 100 x 50 x 4 x 6 = 90,000 cubic feet; whereas the contents of the building should be represented by 300,000 cubic feet. It therefore follows that only about one-third of its capacity is utilized. This means an increase of 220 per cent in the current expenses in regard to storing space, and an increase of 330 per cent. in regard to material and labor for building, together with a proportionate increase for interest on capital, labor, building material, fire insurance and amortisation. As the walls and floor construction of such granaries require to be very strong compared with those erected on the silo system, which need only to be very primitive in construction, and considerably less costly, it needs but little consideration in erecting a granary, to which system the preference should be given.

A dispatch from Mattoon, Ill., says: "It can hardly be denied that more broom corn is shipped from Arcola than from any other station within the great broom corn belt extending along the line of the Illinois Central Railway in Eastern Illinois. Of the crop of 1886 317 carloads of brush have been billed from this point to the large markets for the product—Chicago, Philadelphia, Baltimore, Buffalo, New York, and other points. A considerable quantity is yet held by the more provident class of farmers, and the handsome prices realized for the past year's crop will doubtless encourage the planting of a large acreage next season."



Wheat is being freely sold in Liverpool.

The Texas senate has passed an anti-bucket-shop bill.

Michigan has a bucket-shop bill in process of passage.

Corn, taking a series of years together, is far more certain than wheat.

Winter wheat throughout Missouri is said to be in excellent condition.

A large acreage in the vicinity of Mattoon, Ill., will be planted in broom corn the coming season.

New Orleans, La., bids fair to become the principal shipping point of Western grain and produce.

The shortage in the corn crop in Eastern Iowa is supplemented in full by Western Iowa grain dealers.

Corn is the only cereal crop that has for 250 years been so free as a whole from injury by insect pests.

The wheat crop of Washington Territory for 1886 is placed at 5,800,000 bushels, from an acreage of 445,000.

It is claimed that the Farmers' Alliance elevators in Dakota have been uniformly successful.

At Red Lake Falls, Minn., a village of 1,200 inhabitants, as high as 12,000 bushels of wheat have been marketed in one day.

A grain of corn in a perfect state of preservation was recently taken from the ear of H. C. Wells, of Millbank. It had been in there since he was a child two years old.

The wheat crop of Hungary in 1886 is officially reported at 103,200,000 bushels, against 113,120,000 bushels in 1885. The average crop the past ten years is 90,000,000 bushels.

A very attractive feature of the Montreal Ice Palace this year was the C. P. R.'s display of grains, etc. A show of summer products in a building of ice is a great novelty.

Most of the wheat shipped to Minneapolis, Minn., by the C. M. & St. Paul Railroad is graded No. 1 Northern, while that shipped by the Manitoba & St. Louis is graded No. 1 hard. There is a nigger in the fence somewhere, so says the *Glencoe Enterprise*.

Thirty-three years ago the total wheat product of Victoria, then called Australia Felix, was 498,704½ bushels. The past season's crop aggregated 12,000,000 bushels, which will leave some 5,000,000 bushels for export. The average yield per acre in that country last season was 12 bushels.

The exports of wheat from the United States during January were 8,056,661 bushels, against 4,018,808 bushels the same time last year. Exports for seven months ending Jan. 31 were 59,642,225 bushels, valued at \$51,286,180, against 24,528,390 bushels, valued at \$21,811,458, same time last year.

On the Chicago, Milwaukee & St. Paul R. R. the grain force have been missing their scoop shovels, and finally bagged the party, who evidently was a little cracked on the subject of scoops, for he stole one from a back yard, went to the front of the house, and tried to sell the owner his own scoop. The owner scooped him in.

Cotton seed used to be thrown away at the South. Now 3,000,000 tons of seed are produced per annum, of which 500,000 are utilized, and on this quantity a great monopoly is upbuilding, which expects to rival the Standard Oil Co. Of crude oil, \$5,000,000 worth are produced every year, and \$3,000,000 or more of cotton meal.

The total shipments of wheat by sea from San Francisco last year were 1,100,000 tons; exports of merchandise, \$39,000,000; foreign importations, \$41,941,637; treasure shipment, \$18,713,618. The year's wool product was 38,509,160 pounds. The barley crop was 39,000,000 bushels, more than three times that of the year before.

The *Detroit Tribune* of Feb. 12 says: Michigan is not alone in the unfortunate predicament, but the whole winter wheat belt is similarly situated. Snowless fields in March, and more or less damage from "heaving" of the plant, the result of alternate freezing and thawing, is expected. Bare fields so early as now mean proportionately

greater damage. But there would seem to be too much wheat in the world, and certain it is that the market has come to depend on the element of destruction for the enhancement of values.

Albert A. Munger, a wealthy elevatorman of Chicago, Ill., somewhat noted for his eccentric deeds of charity, recently sent to Geo. A. McKay, a cousin of his, who had been compelled through ill health to resign his position as assistant cashier of the National Bank of Illinois, a deed of the Hastings Block in this city, valued at \$100,000.

One of the hugest jokes of the season is the articles of incorporation of a New York bucket shop. Among its aims are mentioned, "to foster trade and commerce, to reform abuses in trade or business, to secure freedom from unjust and unlawful exactions, and to promote a more enlarged and friendly intercourse between business men."

Oats have been imported from Ontario to Manitoba for the manufacture of oatmeal, on account of the comparative lightness of grain sown in Manitoba the past season. Another reason for importing is that oats can be sent to Manitoba as cheaply as the home article can be bought, and the imported grain is always cleaned, another point in its favor.

The Texas Legislature has asked Congress to appropriate \$10,000 to purchase seed for the drouth sufferers. Texas ought to follow the example of Dakota, which has a bill in process of passage to devote many times that sum for the same purpose. Texas surely could spare \$10,000 for the benefit of her own people without passing the hat for so paltry a sum.

The following is the visible supply of grain on Feb. 12, as compiled by the New York Produce Exchange: Wheat, 61,322,543 bushels—decrease, 447,488 bushels; corn, 16,824,701 bushels—increase, 364,163 bushels; oats, 4,964,720 bushels—increase, 79,598 bushels; rye, 438,730 bushels—increase, 2,347 bushels; barley, 2,121,743 bushels—decrease, 75,741 bushels.

A company with a capital of \$5,000,000 has been organized to undertake the construction of a submarine tunnel between Prince Edward Islands and New Brunswick, provided the government will guarantee 4 per cent. interest on the expenditure. It is claimed that the tunnel will shorten the distance between Liverpool and Canadian ports by several hours.

The decline in wheat and corn has been disastrous to bucket shop speculators, who have lately bought wheat on the war scare. Bulling wheat through a bucket shop is simply bucking against the bank, with the chances three to one in favor of the bank. Had the wheat been bought in open market it would have had some effect, and in all probability averted the decline.

The Duluth Board of Trade adopted the following last week: "Resolved, That the officers, directors and transportation and freight committee of the Board be and are hereby instructed to at once take such steps as may be best calculated to secure an eastern rail rate upon grain, identical at all times with that in force between St. Paul and Minneapolis and all Eastern points."

Complaint is made by the wheat buyers of Fergus Falls, Minn., that the elevators of the Minneapolis & Pacific Road are taking wheat which is tributary to that city by the more advantageous rates which that road offers. Wheat which is going out on the Minneapolis & Pacific should go to Fergus Falls and be shipped over the Manitoba & Northern Pacific, but the former road offers a difference of two cents per bushel in its cheap rates.

Dakota has a total area of 96,596,680 acres, of which 16,844,412 acres are already in farms. The territory produced in 1885 116,557 pounds of cheese, 1,860,358 gallons of milk and 5,852,426 dozen eggs. During 1886 5,000,000 acres of land were disposed of by the government of the United States and by railroads, and it will not be long hence when the territory will develop largely in stock and fat cattle, horses, sheep and swine.

*Daily Business*, of this city, which, by the way, deserves well of business men from always being on the right side, in a late issue has the following in regard to the recent "slump": "The bucket shops scooped a tremendous pot yesterday. The country buying on the war talk, break in European securities, and mid-winter rains last week, was on a very large scale. The trade went to the bucket shops, of course, instead of the regular exchange, where the purchases would have put prices up 20 cents a bushel, and when the edge of the bull news wore off the market was left in a helpless and unsupported state. It only needed a well-directed drive to set



investment holders to unloading and cause a break. If the bucket shops made less than \$2,500,000 on the slump we miss our guess. As a bull broker remarked this morning there is consolation in the thought that now that the bucket shops have frozen out all their bull customers, they will be interested in skinning those of their patrons who are playing the short side."

A Minneapolis paper contains the information that some lots of wheat have recently been taken from that seaboard, going around Chicago, for the sum of \$1.00 per 100 pounds. This must be an interesting proposition to the men in this city who had to pay 30 cents for the privilege of shipping the same kind of property for a little more than two-thirds as great. It is to be hoped that the perpetration of such injustice as this in these transactions should be stopped by the prompt action of the Cullom bill.

An estimate of the wheat crop of Manitoba shows that there is at present about 700,000 bushels still in the country, and 750,000 bushels yet in the elevators and warehouses. The amount exported through the Great Northern Railroad elevators at Port Arthur is estimated at about 4,000,000 bushels. Prices along the international boundary of Dakota show that Canadian wheat has been sold in advance of American wheat for the duty Dakota wheat would have passed through Canadian channels.

The new machine, according to the *Michigan Farmer*, is a portable one. An ordinary grain thrasher is used, the grain is carried through a cylinder, the action of which is the same as other grain threshers. It is said the shelling is more perfect than any other machine can perform the work. The fodder is in a shape for feeding; the cobs are broken up and given in such or more in length and of varying degrees of hardness, however large, are torn into small pieces, and with the leaves and husks.

The estimate of the cereal crops of the United States, published by the Department of Agriculture for 1886, gives the yield of wheat at 457,218,000 bushels, corn 1,665,441,000 bushels, and oats 824,134,000 bushels. The yield of wheat is smaller than in any year since 1879, and the corn crop is behind the record of those years with the exception of 1881-'82-'83; but the yield of oats is in excess of any year except 1885. The money values of these crops are a comparatively bad showing, that of wheat \$314,226,020, corn \$610,311,000 and oats \$186,136,000.

Mr. C. A. Pillsbury says: Spring wheat was never so well out of farmers' hands at this season of the year as it is this year. Last year farmers lost money by holding, and this year they have gone to the other extreme. The current wheat receipts at Minneapolis are from elevators, and not from farmers' hands. The wheat in the Minneapolis market has carried its winter storage, and no more will be paid until June 1. Therefore, rather than grind wheat which will be practically free from storage for some time, the millers are drawing on the country elevators, and usually receipts from country elevators keep up about the milling requirements for some time.

The *Montreal Bulletin* says: "Since the close of navigation a large export business has been done in Canadian wheat from Montreal, Halifax, and Boston to Liverpool, London, Glasgow, Bristol, Antwerp, and Hamburg. In the case of our large shipping firms have already handled three times more grain this winter than any former season, and it is stated that they could have doubled this volume if sufficient ocean tonnage had been offered. There has been lively times in the wheat market along the north and west of Stratford, some large sales having been effected at 78c. per bushel for red winter, on a through freight rate to Liverpool via Portland of 35c. to 36c. per 100 pounds."

President E. M. Shriver, of the Baltimore Corn and Flour Exchange, in his annual report, gave the following figures: "Our receipts of wheat in 1886 were 12,310,534 bushels—an increase as compared with 1885 of 3,896,420 bushels. The exports were 10,575,290 bushels, an increase over 1885 of 6,000,028 bushels. These figures of our wheat trade go far towards compensating for the meagre and discouraging business in wheat in 1885. The receipts of corn in 1886 were 15,099,869 bushels, a decrease as compared with 1885 of 848,959 bushels. The exports were 14,076,379 bushels, an increase over 1885 of 324,183 bushels. The continued liberal volume of business in corn in our market is encouraging. The export demand for this cereal has been almost continuous during

the year. Our receipts of oats in 1886 were 1,809,258 bushels, an increase over 1885 of 7,464 bushels.

A society has been formed at Hilliards, Ohio, for the purpose of exterminating the rats in that locality. Thousands of dollars' worth of last year's crops have been destroyed by these pests. A wholesale firm at Louisville, Ky., has advertised for any number of good, sound cats, offering to pay fair cash prices. The firm is acting as the agent of a committee of citizens from Casey county, Ky. An epidemic prevailed there not long since which very effectually destroyed the feline tribe, and now the county is overrun with rats.

It is said that several of the insurance companies interested in the Duluth elevator fire of Nov. 27 are not paying promptly. The expiration of the usual sixty days has not brought the cash into the hands of men who owned the grain, and some of the latter have thrown out intimations to the effect that they may see their way clear to publish the names of the tardy ones for the benefit of those who carry the stocks of grain now in the West. It is well known that the greater part of the capital invested in carrying the enormous visible supply of wheat is furnished by Chicago, and parties who furnish the money are naturally anxious to place insurance where they can collect promptly in the event of loss.

Chicago elevators and vessels contained last Saturday evening 13,701,118 bushels of wheat, 7,435,141 bushels of corn, 1,049,424 bushels of oats, 154,034 bushels of rye, and 244,247 bushels of barley; total, 22,583,964 bushels of all kinds of grain, against 17,921,819 bushels a year ago. For the same date the Secretary of the Chicago Board of Trade states the visible supply of grain in the United States and Canada as 61,319,982 bushels of wheat, 16,824,566 bushels of corn, 4,963,991 bushels of oats, 440,543 bushels of rye, and 2,121,274 bushels of barley. These figures are smaller than the corresponding ones a week ago by 449,538 in wheat and larger by 364,185 in corn. The visible supply of wheat for the corresponding week a year ago decreased 1,012,560 bushels.

A large amount of ear corn is being delivered at Heyworth, Ill., and in some of the boxes there is considerable snow. The farmers claim that the snow is so light that a wagon bed 10 feet 2 inches long, 3 feet wide and 1 foot 3 inches deep would not, when filled with snow, weigh more than from 35 to 80 pounds. The buyers contended that the farmers are wide of the mark, so a sled with a bed of the above-given size was weighed and filled even full of snow. Before it was weighed there was a very wide difference of opinion as to what it would weigh when full, opinions varying from 35 to 120 pounds. When weighed it was a genuine surprise, as it weighed 500 pounds. So the farmers have been selling quite a quantity of snow to grain dealers with their ear corn.

## ELEVATORS.

[By Arthur T. Timewell, Winnipeg, in the *Northwest Farmer*.]

In the face of the rapidly increasing growth in the acreage of land under cultivation in this country, and the extent the yield of wheat beyond what is required for home consumption will arrive at in the near future, the question of handling our produce naturally presents itself, and the necessity of a thorough system of elevators becomes obvious. Good, efficient elevators, and plenty of them, are as necessary to the farmer, the dealer and the town in which they are located as to our railway companies.

To the farmer, because wherever an elevator is built there is the market for the sale of wheat, and a market where competition is carried on in proportion to the facility in handling the produce, and the more complete the elevator the greater the competition, for the obvious reason that it enables more buyers to be accommodated. The immediate benefit to the producer becomes at once apparent, and the advantages of such elevators, with three or four buyers giving the best price, and paying that price in cash, must at once have a different result to the present system which exists at many points of shipping in sacks to a consignee many miles away, with very often misunderstanding and delay in returns being made, or as at other points only having one man to sell to, the owner perhaps of a flat warehouse, and which from its imperfect construction the grain can not be handled in a sufficiently rapid manner to accommodate a number of buyers.

The advantage of efficient elevators to the dealer have to transact a larger business, and therefore to pay a higher price for that very reason.

The advantage to the town enjoying the circulation of

the ready cash is so obvious that it scarcely calls for comment.

And the advantages to the railway companies, obliged from their gigantic proportions to carry such a vast quantity of rolling stock, must be very great, because with an efficient system of elevators a minimum of dead rolling stock is arrived at.

Granted the necessity of elevators, the question is how should those buildings be constructed.

Mistakes are often made in the storage capacity provided, and in deciding this very important point, of course, the yield of the immediate neighborhood must be calculated, but mistakes are often made in building the house on too small a scale, as frequently, owing to the inability of the railway companies to always keep up the supply of cars, buyers are obliged to abstain from buying because the elevator is full, which event is most likely to happen at a time when the teaming is good, and thereby proving a double disadvantage to the farmer. Again, in deciding upon the capacity, it should always be borne in mind that a considerable portion of the total capacity is required to be kept empty in order that the grain may be cleaned and turned, or otherwise handled, so that some bins can not be used for storage purposes. A very great economy of space can be exercised, and benefit to all concerned arrived at, by constructing your elevator in such a manner that all grain is cleaned as it is received, and stored clean, and that this may be effected so that no delay is caused, a large and good separator with sufficient room on the ground story is necessary, and there it should always be fixed, and great care should be exercised in the choice of the separator.

The next point to be considered is sufficient receiving accommodation, so that farmers may not be detained longer than is necessary, and the receiving hoppers should be approached at an easy grade. The capacity of the pit or sink is of great importance, and although in many parts of the country these have to be necessarily water-tight in order to get them large enough, still economy in this point will be a mistake, because in the event of any description of break down you are with a small pit obliged to stop receiving.

The shipping facilities should be the next consideration, and in order to avoid mistakes in weights the scales (to weigh at least half a carload) should be placed under the shipping bins, with the beam fixed on the ground floor, so that the car may be loaded directly from the weigh hopper. By fixing the separator and beam of shipping scale on the ground floor a great saving of labor is effected.

## THE EUROPEAN WHEAT CROP.

The mail advices from abroad in regard to wheat are less favorable than the cables. A correspondent of a London grain paper writes that the winter has been very severe in England. A great many thousand acres were not sown last fall, owing to the early frosts, and 20 per cent. of the fields in the lower countries were covered with ice. The correspondent of the *Daily News* reports from Odessa that a heavy, black, blighting frost has covered the South of Russia, where the fields have been bare of snow all winter. Other advices confirm this. In the central part of Russia heavy snows are reported. The official report of the wheat crop of Hungary is a surprise. The average production for ten years has been a trifle over 90,000,000 bushels. A crop below the average was estimated last summer, but the official figures are 103,200,000 bushels, against 113,120,000 bushels in 1885 and 114,444,000 bushels in 1884. Mr. Pillsbury, of Minneapolis, was on the floor of the Produce Exchange this morning. He said: "Spring wheat was never so well out of farmers' hands at this season of the year as it is this year. Last year farmers lost money by holding and this year they have gone to the other extreme. The current wheat receipts at Minneapolis are from elevators and not from farmers' hands. The wheat in the Minneapolis elevators has carried its winter storage; and no more will have to be paid until June 1. Therefore, rather than grind wheat which will be practically free from storage for some time the millers are drawing on the country elevators, and usually receipts from country elevators keep up to milling requirements for some time."

Forty thousand sacks of corn awaiting shipment at Caseyville, Ky., and owned by Wilson Dyer, have been submerged by the high water at that point, and the grain, valued at \$40,000, is supposed to be a total loss.



## ELEVATOR AND GRAIN NEWS

A grain elevator will be built at Knoxville, Tenn.  
L. Bammertin, maltster, Massillon, Ohio, has assigned.  
A \$5,000 grain elevator is to be erected at Eden, Dak.  
A. S. Catron has gone into the grain trade at Merna, Ill.

R. Monarch, Owensboro, Ky., will erect a \$100,000 distillery.

B. P. Lewis & Co., grain dealers, Wiota, Iowa, have sold out.

Galby & Acker, grain dealers of Ridgeway, Iowa, have sold out.

Bradley, Ill., will soon have a string of corn cribs 800 feet long.

Bacon & Co., of Anchor, Ill., have 25,000 bushels of corn in crib.

Alexander Sinclair, brewer at Sarnia, Ont., has made an assignment.

Mason & Cook, of Vinton, Va., contemplate erecting a grain elevator.

Henry Mueller & Co., Santa Barbara, Cal., will sell their brewery.

B. F. Miller, grain dealer at Leaf River, Ill., has made an assignment.

Geo. McDonald has sold out his grain business at Minden City, Mich.

Wm. McCoy has sold out his flour and feed business at Coffeyville, Kan.

Fritz & Meier, brewers, Grass Valley, Cal., have dissolved partnership.

Geo. McDonald has sold out his grain business at Minden City, Mich.

Jeannot & Piper, flour and feed dealers at Muskegon, Mich., have sold out.

Ackerman & Sons, brewers at Syracuse, N. Y., have dissolved partnership.

There were 400,000 bushels of wheat raised in Hubbard county, Minn., in 1886.

Louis H. Quimby, hay and feed dealer at Denver, Col., has made an assignment.

Dodge & Zimmerman, of Normal, Ill., have sold their feed mill to Zimmer Bros.

Broom corn is being shipped in large quantities from Omaha, Neb., to Oregon.

The elevators of Minnisciska, Minn., have a storage capacity of 135,000 bushels.

Minneapolis grain men are again protesting against exorbitant switching rates.

Sked & Gillett, hay and feed dealers, Denver, Col., have dissolved partnership.

H. H. Heath & Co., grain dealers, Wonewoc, Wis., have dissolved partnership.

Campbell Bros., grain dealers at Fort Collins, Col., have dissolved partnership.

The grocery and grain firm of Christian & Miller, at Atlanta, Tex., has dissolved.

Holley & Allen, grain and provision dealers at Chicago, Ill., have suspended business.

The Lone Star Brewing Co., of San Antonio, Tex., contemplates enlarging its brewery.

T. R. Burling has been admitted to the grain firm of D. E. Champion, at Firth, Neb.

T. Meagher contemplates building an elevator and coal and iron wharves at Mobile, Ala.

Sholes, Chase & Co., hay and grain dealers, Providence, R. I., have dissolved partnership.

J. R. Megrue & Co., grain merchants at Cincinnati, Ohio, have dissolved partnership.

L. A. Gilbert will probably be appointed chief inspector of grain for the state of Minnesota.

Mareness Bros., grain commissioners at Early, Iowa, have been succeeded by Wm. Allen.

Cropsey, Ill., now boasts of two new grain firms, Stafford & Putnam and Pope & Williams.

Vannah, Sweeney & Co., hay and grain dealers, Waldoboro, Me., have dissolved partnership.

Geo. Alexander, formerly in the grain and live stock business at Dysart, Iowa, has sold out.

The grain buyers at Grand Meadow, Minn., have been having a grand row among themselves.

Stafford & Putnam and Pope & Williams have recently gone into the grain business at Cropsey, Ill.

The elevators at Warner, Dak., have handled over 150,000 bushels of grain of last year's crop.

An automatic grain measure has been patented by Mr. Samuel E. Croshaw, of Three Oaks, Mich.

The Peter Schoenhofen Brewing Co., at Chicago, Ill., has increased its capital stock to \$1,000,000.

The parties who bought the burned wheat after a large fire in Duluth, Minn., paid \$100,000 for it. They have

sold half of it for \$100,000, and expect to clear a cool \$100,000 out of the investment.

Feek & Ede, proprietors of the Winnipeg elevator at Winnipeg, Man., have dissolved partnership.

W. H. Funk has succeeded H. H. Heath & Co. in the grain and lumber business at Wonewoc, Wis.

Henry J. Straight, grain dealer, formerly of South Bend, Neb., has removed to Wabash, that state.

Haynes, Gordon & Co. have put in a new horse power and are improving their elevator at Ballard, Ill.

W. H. Negley, formerly in the grain business at Walnut, Iowa, has removed to Audubon, that state.

The grain merchants at Gibson, Ill., are building immense lengths of corn cribs for storage purposes.

The Lone Star Brewing Co., San Antonio, Tex., contemplates greatly enlarging the capacity of its brewery.

The Kauffman Brewing Co., Cincinnati, Ohio, contemplates building a large brewery at Chattanooga, Tenn.

W. W. Woosley, of Peoria, Ill., has purchased ground at Little Rock, Ark., on which he will erect a large brewery.

The Cosgrove Brewing and Malting Company, of Toronto, Canada, has failed. Liabilities \$100,000; assets \$850,000.

The Marshall Elevator, at Marshall, Ill., has changed hands; John R. McReynolds retiring and Besser & Marvin taking charge.

Oliver Foggy has retired from the grain firm of Johns, Foggy & Co., at New London, Iowa, and J. M. Crawford has been admitted.

Preparations are being made to build a new elevator and mill on the site of Moore's elevator, which was burned at Cerro Gordo, Ill.

The Detroit Railroad Elevator Company, at Detroit, Mich., will build a \$120,000 addition to the Atwater street elevator of that city.

G. Vogele's new brewery at La Crosse, Wis., is completed, and work commenced Feb. 1. It has a daily capacity of thirty barrels.

The grain dealers at Wapello, Ill., were recently compelled to start two corn shellers at their cribs in order to make room for ear corn.

Eleven elevators in New York and Brooklyn were compelled to stop operations for awhile during the recent strike of the longshoremen.

The Duluth Elevator Co. is the name of the new Sawyer-Peavey syndicate. Work on two elevators will be commenced at an early day.

A new grain elevator, 48x150, is to be erected at Lake, Ill., at a cost of \$25,000. Henry Raeder & Co., of Chicago, are preparing the plans.

Pilot Point, Tex., is mentioned as a good point for a grain elevator. There is an average of 40,000 bushels of wheat handled there every year.

The Ashton Flour and Feed Company of Muscatine, Iowa, has let the contract for the erection of a two-story addition, 40x60, to their feed mill.

The ale brewing firm of Flanagan, May & Co., New York City, has dissolved. The new firm will continue the business under the same name.

Webster Mull, one of our subscribers, writes us that he is at present engineering in the Minneapolis & Northern Elevator at Gardner, Cass Co., Dak.

W. B. Probasco, of Bloomington, Ill., has in crib 55,000 bushels of oats and 60,000 bushels of corn, which he is holding for more favorable markets.

The Montgomery Land & Improvement Co., Montgomery, Ala., is negotiating with a brewery company for the erection of works to cost about \$75,000.

J. W. Turner has removed from Turner, Dak., and now gets his AMERICAN ELEVATOR AND GRAIN TRADE at No. 58, Chamber of Commerce, Minneapolis.

Mr. Percy Jones, formerly of Belleflower, Ill., has removed to Leroy, that state, and will buy grain for Jones Bros., who are buying for a Kansas syndicate.

Kahlmus, Muller & Co., grain and flour commission merchants at Philadelphia, will continue in the interest of the estate of John Kahlmus until May 31, 1887.

Fredk. W. Wolf, of Chicago, Ill., manufacturer of malt kiln floors, etc., has been licensed to incorporate as the Fred. W. Wolf Co., with a capital stock of \$200,000.

A large flour mill and elevator are contemplated at Keewatin, N. W. Ter. A. Mitchell, of Montreal, and J. Mather, of the Keewatin Lumbering Co., are interested.

Mr. J. L. Douglas, of Shirley, Ill., is closing out his grain business preparatory to entering upon the duties of deputy treasurer of McLean county, to which he has been elected.

C. Frederick, Sr., of Keokuk, Iowa, has purchased the elevator building near the old "McConn Mill," and will tear it down and use the machinery in a brick works that he is to build.

Mr. S. W. Arbutnot, of Correctionville, Iowa, has been refitting his elevator and adding new machinery, belting, buckets, etc., which he purchased of Geo. L. Jarrett, Des Moines, Iowa.

Sieffert & Weise, Avoca, Iowa, have purchased a large elevator building and have refitted the same throughout, having put in an engine and boiler, shafting, pulleys, belting, etc., and in short reconstructed the elevator, and

now have one of the finest structures on the Rock Island Road. The engine and boiler and all the machinery, and a millwright to put the same in place, were furnished by Geo. L. Jarrett, Des Moines, Iowa.

Mr. James Everington, superintendent of the Pillsbury Elevator at Minneapolis, Minn., has invented a useful device for obtaining samples from elevator bins, and also detecting damage to grain without moving it.

Moses Edwards, of Albia, Iowa, who was burned out a short time ago, is rebuilding and will soon be ready for operations. He has purchased his belting, elevator buckets, etc., including all supplies, of Geo. L. Jarrett, Des Moines, Iowa.

W. R. Hagen, of Minneapolis, Minn., a commission man dealing in options between Minneapolis and Chicago, has failed. He was "long" on about 200,000 bushels of May wheat to members of the Board, which was margined down to 81 cents.

The Iowa Elevator Co., Des Moines, Iowa, have made a change in superintendents, and is refitting its elevator property preparatory for the new year's business. New pumps, drags, pulleys, etc., were purchased of Geo. L. Jarrett, Des Moines, Iowa.

In the case of Wm. Farnsworth as receiver of the Northwestern Grain Dealers' Association vs. A. B. Robbins, who appealed to the Minnesota Supreme Court for a new trial to decide the question of liabilities of stockholders on stock subscribed for, the court refused to grant it.

W. N. Thomas has purchased the Eagle Rock Brewery, at Eagle Rock, Idaho, and will make some necessary improvements, one very important one being the remodeling of the old beer hall into a malt kiln. About 16,000 to 18,000 bushels of barley will be consumed annually.

Mr. P. F. Murray, Harlan, Iowa, has gone into the grain business again, and has built a new elevator for that purpose, in which he has put a full line of shelling and cleaning machinery. The plans were prepared and the machinery furnished by Geo. L. Jarrett, Des Moines, Iowa.

Mr. Geo. F. Westcott, of Minneapolis, Minn., has invented, and will soon introduce to the trade, a new grain drier. It consists substantially of a cylinder through which grain is passed, and as it does so, being subjected to a current of hot air produced by an exhaust, ending in cold air being forced through the grain as it is discharged. One of the machines is in use in Japan, where Mr. Westcott recently superintended the erection of a mill.

The Duluth Elevator Company, of Duluth, Minn., has filed articles of incorporation. Among those interested are A. J. Sawyer, of Duluth; F. H. Peavey, of Minneapolis, and P. B. Weare, of Chicago. They will build what is known as the Sawyer-Peavey system of elevators at West Superior, Minn., on property owned by the Omaha Road. J. T. Moulton, the architect, has commenced work on Elevator "J." They are to be used largely for corn.

The Council Bluffs *Nonpareil*, in a recent issue, says: "Chief Templeton visited the Union Elevator yesterday and found the building under a first-class system of fire protection. H. O. Cook, under whose efficient management the elevator now is, has made quite a number of changes which increases its security against loss of any kind. The structure has now in its bins and storage rooms about 600,000 bushels of grain of all kinds. Chief Templeton states that it is remarkable what care is being taken by Mr. Cook to guard the property intrusted to his care."

At Erie, Pa., a stranger giving his name as James Packard, of New York, is in prison on the charge of swindling. Packard's scheme is to operate upon grain buyers, upon the representation that he is a farmer in a near-by locality, and in making his fraudulent sales takes a sum of money to bind his contracts. His operations have been very extensive in Western New York, Pennsylvania and Ohio. Packard fell into the hands of officers after selling a thousand bushels of barley half a dozen times in the western part of Erie county. He is noncommittal, is a man past middle life, and has an air of shrewdness.

Recent developments in the war between the farmers and grain dealers of Champaign county, Ill., which we mentioned in a previous issue, show some sharp skirmishing. The farmers, resenting what they considered an arbitrary arrangement in regard to the prices paid for grain by the buyers, have organized at several points local companies to ship their own grain. Several of the leading grain dealers have published cards in the local papers denying their connection with the grain dealers' association, some of them protesting that they never belonged to the organization, and others stating that they had withdrawn from it.

Himebaugh & Merriam, of the Union Elevator Co., Omaha, Neb., have recently moved into their new office, which has been in course of erection some time. The building is a frame structure, and presents a very plain exterior, but its interior decoration is exceedingly handsome, and it has the honor of being the most elegant business structure in the city. The walls are covered with grooved wood, and the ceiling, which is the under part of the roof, is lined in like manner, and supported by ornamental inverted trusses. The apartments are formed by plate glass partitions, and the doors are ornamented with richly wrought colored and cut glass.



# THE AMERICAN ELEVATOR AND GRAIN TRADE.

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HARLEY B. MITCHELL, - - - Editor.

## ADVERTISING.

This paper has a large circulation among the elevator men and grain dealers of the country, and is the best medium in the United States for reaching this trade. Advertising rates made known upon application.

## CORRESPONDENCE.

We solicit correspondence upon all topics of interest connected with the handling of grain or cognate subjects.

CHICAGO, ILL., FEB. 15, 1887.

## THE CENTAL.

Among other excellent recommendations made by the National Board of Trade at its annual meeting on Jan. 19-21, was that a uniform standard for grain measure should be established in the United States and other countries which export or import grain to any considerable extent. For this purpose the cental of 100 pounds avoirdupois was recommended and urged for general adoption.

This recommendation has been made many times before, and Congress has been memorialized on the subject. The cental is universally adopted on the Pacific coast, and its general adoption would be a step in the right direction. However, as it is the importing countries that virtually fix the price of grain, we presume that any successful initiative must originate with them. But the power of usage is great; and greater in England than with us. The cental will hardly become a standard for many years yet.

## THE NEBRASKA GRAIN MEN.

The Lincoln correspondent of the Omaha *Bee* has discovered that the Nebraska grain dealers are a very bad set of men, and he wades through a column to prove that Senator Keckley's bill should become law right away. And, by the by, the bill passed the Nebraska senate with only three dissenting voices. The *Bee* man has discovered, or alleges that he has discovered, the constitution governing the Nebraska Grain Dealers' Association, which he publishes. A disinterested party reading this constitution would not see in it anything particularly subversive of our institutions. This Keckley bill prohibits pooling by grain dealers to fix the price of grain. Mr. Keckley overlooks the fact that grain prices are not fixed by local buyers, but are made in the open markets of the world; and that the price which the local grain buyer can pay depends upon the market price and the cost of handling and transportation. Local laws for regulating grain buyers too often overlook the fact that the grain buyer is quite as subject to the law of supply and demand as other people. He is not an autocrat and his purse is not unlimited.

Everywhere competition has cut down profits to a minimum and grain buyers have often ruined themselves by competition with each other. The

business is a risky one and ought to have a safe margin in order to protect the buyer. This, however, the Nebraska solons are not willing the grain buyer should have.

And, by the way, a decision has recently been handed down in the Supreme Court of Massachusetts which has some bearing on this question. Certain manufacturers combined so as to get a fair price on their goods. It was alleged that this combination was in restraint of trade. It was proved that the combination of the manufacturers did not restrict production or the sale of the commodity, but simply made a fair price on the goods. This, the court held, was a lawful purpose and held also that a contract was not necessarily injurious or wrongful to the public because it was advantageous to the contractors. The Nebraska legislators ought to read that decision in full.

## THE CRUSADE ON THE BUCKET SHOPS.

The state legislatures of a number of states are coming up bravely to the aid of the Chicago Board and the New York Stock Exchange in the war on the bucket shops. A bill has been introduced in the Kansas legislature that will eradicate the institution in that state. A similar bill has been introduced in the Missouri legislature. In Texas, hardly beyond question, the bucket shop will have to go, as the bill before the Texas legislature has hardly any opposition. Indeed, the lower house of that state passed a resolution calling upon Congress to pass a national law to strangle the bucket shops. In Illinois Senator Riddle has introduced an excellent bill having the same general purpose. The bucket-shop fellows will have to run their game in the future, it would seem, just as their brethren of the green cloth run theirs.

## "A POSSIBLE SOLUTION."

The Executive Committee of the Central Traffic Association, at their Cleveland meeting, adopted resolutions which show the proper spirit of compliance with the provisions of the Cullom bill, and a desire to interpret them in accordance with the broad spirit which Senator Cullom manifested, and not so as to make the Inter-State Bill odious or its operation unjust. The managers of the roads see that the bill is not intended to rob the roads, but simply prevents them from robbing Peter to pay Paul.

But the *Pioneer Press* evidently thinks hard of the long and short haul provision, and suggests a way by which the trunk lines running between St. Paul and Chicago can nullify the bill. Its plan is that the seven trunk lines build a road without any stations between St. Paul and Chicago; a through line with no local traffic whatever. This line could make its through rate whatever it liked, as it would have no way stations to be discriminated against. The *Pioneer Press* says: "Now, all the other trunk lines, holding the stock of this road, would share its earnings and get their benefit from the business in precisely the same way as they now do by carrying it over their own lines. And each of them would, in that event, make a through rate to St. Paul over its own track as high as the highest local rate charged to any intermediate station. This would be a practical refusal to carry through freight; but it would be entirely legitimate, since one road may make a higher charge than another if it wants to do so; and nobody would suffer injustice, since the shipper could always get a low rate by using the consolidated through line. The result would be that local rates might be reduced only as the increase of business warranted, that through rates might fall to an even lower point than has yet been reached, that the short haul clause of the Inter-State Commerce Bill would be obeyed, and yet the West would still enjoy cheap transportation and the railroad companies be saved from bankruptcy without sacrificing their through traffic. The same thing could be done between Chicago and New York; or, instead of building a new road, the trunk lines might unite in buying the stock of some line like a combina-

tion of the Nickel Plate and the West Shore, which has practically no local business to attend to, and use this as the great through common carrier for them all. It is, to say the least, possible that this plan, which no one had hitherto even imagined, may be found an easy, and, indeed, a not unprofitable way out of the difficulty into which the short haul principle, is strictly construed, would plunge not only the railroads but the people of the great interior West."

This shows a great head. Unfortunately, there is one little point that the genius has overlooked. That is that the Cullom Bill is liable to be amended after these through lines are built, so as to fetch them up with a very round turn. In that case the trunk lines would have an elephant on their hands.

## EXPORTS OF BREADSTUFFS.

The report of the Bureau of Statistics on the exports of breadstuffs during January, issued Feb. 9, is at hand, and on the whole exhibits a very gratifying increase. The total value of breadstuffs exported during January, 1887, was \$14,528,809, against \$9,407,315 in January, 1886. The value of the exports for the seven months ending Jan. 31, 1887, was over \$30,000,000 in excess of the seven months ending Jan. 31, 1886.

To particularize, the exports of corn in January last were 4,181,124 bushels, against 6,074,522 bushels in the same month in 1886. The exports of oats fell from 225,675 bushels in January, 1886, to 19,511 bushels in 1887. Of rye, there were 8,000 bushels exported in January, 1887, against none in the same month in 1886. Wheat shows a remarkable gain, being 8,056,661 bushels last month, against 4,018,808 bushels in the same month in 1886.

## GRAIN LAWS IN MINNESOTA.

A perfect avalanche of bills has been projected on the legislature of Minnesota, regulating the railroads and warehouses of that state. The one which has attracted the most attention is that of Mr. Ignatius Donnelly, the particulars of which are given on another page. It is claimed in some quarters that the bill would be disastrous, as there are still 20,000,000 bushels of wheat in store in Minnesota and Dakota, which will remain in store until after July 1.

Mr. Whiteman has introduced a bill which was drawn up at the instance of the Duluth Board of Trade. Its title is to preserve the quality of grain in store. Warehouse receipts shall not be issued for a longer time than eighteen months from any warehouse in St. Paul, Minneapolis, or Duluth. Warehousemen shall report to the railroad commissioners at certain times the amount and grade of such expired receipts, and the commissioners shall advertise the same in a daily newspaper; and at the expiration of ten days, if the receipts are not taken up, shall sell the wheat at auction. The money, after all expenses are paid, is to be turned over to the owner on presentation of the receipts. This would cause the old wheat to be shipped out first.

Other bills are designed to remedy the defects of the old warehouse law, one provision of which has been declared unconstitutional by the Supreme Court of the state. This provision related to the clause rendering it obligatory on the railroads to allow the erection of elevators on their lines of any capacity and by any person. If half the bills introduced become laws, the legislation of the present session on grain will present a curious piece of patchwork.

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## Editorial Mention.

MESSRS. A. KOEHLER & Co., of Geneva, Fillmore Co., Neb., write us: "We value your paper very highly."

THE Interstate Commerce Bill has become law, and yet we have not heard of a single railroad that proposes to go into bankruptcy.

THE bill establishing state grain inspection at East St. Louis has been favorably reported from the committee in the Illinois Legislature.

WE are pleased to learn that the wife of Mr. M. F. Seeley, the elevator builder of Fremont, Neb., is one of nine heirs to an estate worth \$400,000.

MR. SALISBURY has introduced in the Missouri legislature a "pool" bill which makes no distinction between bucket shop, pool room or Board of Trade.

IN printing the exports of grain in this paper last month an unaccountable blunder was made in giving the exports from the port of New York as those of the entire country.

A BILL has been introduced in the Legislature of California which will prevent the grain bags made at the state's prison from getting into the hands of the bag speculators.

THE extension of the Southern Pacific Railroad has opened up for grain raising thousands of acres of the best land in the state, which has hitherto been used only for stock raising.

IT is said that over 1,000,000 bushels of corn are now engaged in St. Louis for foreign delivery, via the Mississippi River, and it is thought that the Mississippi route will have a boom.

THE Open Board of Trade of this city will in all probability abandon trading in grain, and transform itself into a Stock Exchange. This would be a good move, both for it and the regular Board.

MINNESOTA farmers denounce the rates on the roads west of St. Paul, Minneapolis and Duluth as unjust and extortionate, and demand the passage of Mr. Donnelly's bill to regulate freight rates on grain.

MESSRS. CLINES & MOORE, of Panora, Iowa, acknowledge the receipt of a sample copy of the AMERICAN ELEVATOR AND GRAIN TRADE by inclosing a subscription and indorsing it, "Too good to be without."

NORTHWESTERN advices state that with over eighteen million bushels of wheat in store at Minneapolis, St. Paul and Duluth, with the harvest only six months off, there is not much danger of shortage in spring wheat.

IT is really too bad that grain men can't get back on farmers by enacting some laws to regulate the immaculate granger. Almost any grain dealer or miller can tell of granger practices that are in abundant need of regulation.

WE have no objection to the Mississippi River route or its improvement, but would it not be well to stop and count the cost before the present system of so-called improvement is continued? It is said that the danger of floods and overflows can be obviated by creating a new outlet through Lake Borgne at a cost of half a million dollars. Would it not be the part of wisdom to try this

cheap remedy rather than continue a course of so-called improvements, which bid fair to cost a hundred times that amount?

TO USE the language of a correspondent, the railroad bill before the Missouri Legislature is "a rip-snorter." It prohibits pretty much everything that shippers complain of; but after all is not unjust to the roads but fair to the shippers.

THE Chesapeake and Ohio Canal has cost the state of Maryland in principal and interest \$15,000,000. One leading reason for its ruin has been that politics got hold of it. Politics is not calculated to help any great public enterprise.

IT is said that the scheme of Chicago and Eastern capitalists to control the wheat trade of the Northwest is still on. James Hill, President of the Manitoba Road, is credited with being at the head of the enterprise, backed by Chicago and New York capital.

A BILL has been introduced in the Missouri legislature to compel the railroad companies to furnish cars to shippers of grain and cattle in good order. It has a clause in it that authorizes shippers in cases of emergency to repair cars at the expense of the company.

THE bucket shops of this city have, through an alderman, made an effort to have their business licensed, and thus legalized. The attempt, however, will probably fail, as the corporation counsel has already given an opinion that the bucket shops are gambling places pure and simple.

THE flour and grain received in New York last year, reducing flour to grain, aggregated over 130,000,000 bushels. Of this vast quantity the New York canals delivered in the seven months comprising the season of navigation 44,000,000 bushels, against 30,000,000 bushels in 1885.

PRESIDENT LOUCKS, of the Dakota Farmers' Alliance, wants elevator receipts made negotiable, and thinks the territorial legislature should pass laws to prevent unjust weights, dockage, undergrading, etc. Perhaps Mr. Loucks will suggest a law which will prevent farmers from putting screenings, etc., in the wheat.

REPORTS as to the growing wheat crop can hardly be regarded as favorable, on the whole. In Michigan and Kansas reports are unfavorable. In Illinois the outlook is quite generally good. Indiana does not give very general favorable reports, although there is no prospect of any great danger. Ohio's winter-wheat crop shows up very well.

SOME of the English papers seem very much "worked up" over the Cullom Bill. The London correspondent of the *Liverpool Journal of Commerce* thinks the bill "will promote the commercial disintegration of the United States." We will wager a new hat that the correspondent in question has not read the bill and does not know anything about its provisions.

IF you want to buy or sell an elevator, machinery, or want a situation or desire to get competent help, advertise in the AMERICAN ELEVATOR AND GRAIN TRADE. This journal circulates among exactly the kind of people you wish to reach; and an advertisement in its columns will reach more people of the class you wish to talk to than it would in a score of metropolitan journals.

THE "Sheldon" Patent Compound Lever Pinch Bar is one of the new devices advertised in this issue. During the first four months after its introduction we are informed that more than 1,500 of these bars were sold and are now in constant use. It works on the car-wheel in two places, lifting and rolling at the same time. It will work on a frosty track without trouble, and the points that come in contact with the wheel are made of the best cast-

steel, case hardened. The heel steel is made of the celebrated imported Mush et steel. It can be changed to use all four corners.

ROWLAND'S SPEED REGULATOR, advertised on another page, is something which should invite the attention of elevator men, especially those who have fanning mills run by horse or any other power which varies. The patentee of this regulator is Mr. Christian Rowland, of Lanark, Ill., who will cheerfully furnish particulars to all who write him.

THE bill introduced in the Kansas Legislature to prevent pooling is very strict in its provisions. It forbids railroads or any of their officers or employees from being interested in the business of handling grain, lumber, coal, etc. It provides for a commission with full powers to equalize rates, and makes it compulsory upon the part of the roads to deliver freight to any connecting line or road.

THE Chicago Board of Trade is certainly making a commendable effort to eliminate every particle of uncommercial practice. It is showing the courage to discipline offenders, and we have no doubt that the present reform movement will be wholly successful. We might add that the sneers of papers in other cities come with a bad grace from those who have been prominent in criticism in the past.

THE Detroit Board of Trade has been considerably worked up over the reports which have been circulated that the business of that body is declining. While the truth of the reports cannot be denied, it is alleged that the decrease of business is owing wholly to a lack of sufficient elevator capacity. An addition to the elevator capacity of Detroit has already been provided for; and it is to be hoped that such another grain blockade will not soon again be witnessed.

AT the meeting of the Lake Carriers' Association, at Buffalo, on Jan. 18, it was agreed that the association should not commit itself on the general question of contesting shortages, but should stand ready to take up any particular case. A committee, consisting of Messrs. E. T. Evans, Capt. W. P. Henry and Capt. Thomas Maytham, was appointed to formulate a plan of arbitration in the settlement of salvage claims, the committee to submit its plan to the managers at other lake ports.

SOME of these days, if we get into a row with England, opponents of the Hennepin Canal will kick themselves to think the canal was not built. According to our treaty with England, the United States is allowed only one warship on the great lakes. This particular ship is the "Michigan," a vessel which tugs and canal boats have to steer clear of for fear of disabling her. Yet no boat could enter the great lakes from the Atlantic seaboard, owing to the fact that Canada holds the canals, and naval science has not found itself equal to the task of sailing up Niagara Falls. Let the Hennepin be built.

MR. H. H. HARRISON, with Borden, Selleck & Co., of this city, has invented an appliance which can be put upon scales at small expense, and upon which he has received letters patent. This device will automatically stamp upon a ticket the exact weight of the load, no more and no less. Moreover, it will stamp the weight on two cards, or three, at the same time, so that, if it be desired, one register may be retained for record, one sent to the consignor, and the other to the consignee. It works simply and reliably, and it is not an expensive apparatus. Mr. Harrison is well known as the inventor of the Harrison Conveyor.

MERCHANT & Co., of Philadelphia, have removed the location of their Chicago house from 182 and 184 E. Kinzie St., to 202 Lake St. This change of location was rendered necessary on account of the firm's rapidly increasing business in Chicago and the West. Mr. Le Huray, who has



represented Messrs. Merchant & Co.'s New York house for the past three years, sailed on the first of the year for London, where the firm are about to open an office in order to attend to their largely increasing importation business. We are pleased to note these evidences of increasing prosperity on the part of this well-known and reliable firm.

### THE CORNERING BUSINESS.

Since the recent discussion by Judge Daniels, of the State Supreme Court, in New York City, in a case of cornering lard, that the business is no more than "respectable robbery," the public press is taking up the subject in the serious spirit it is well calculated to excite. Cornering, or pooling, is simply the combination of a few persons to control the market, by first getting a monopoly of the supply, locking it out of the market, and forcing up prices until the greed of the conspiring monopolists is satisfied. In this way wheat, meat, coal, flour, lard, and various other necessities of life are kept out of the reach of consumers except at the prices which the monopolists choose to demand of them. Rich and poor, high and low, must all alike submit to their heartless exactions. The purpose of these brigands of speculators is to make money, and only that. They do not care who goes hungry or cold, so long as they add to their accumulations by the general suffering.

In the case of wheat, a few wealthy speculators resolve to control the wheat market, and in order to do it they agree to buy millions of bushels of wheat. They may not buy it at all, and oftener do not. Having got control of the market, they proceed to put up prices beyond the normal market quotations. As they have got the wheat into their own hands, they hold back what is needed to supply the actual demands in order to sustain the enforced prices. The latter become artificial at once, and the market is demoralized. The smaller buyers and the millers are compelled to submit to the exactions of the speculators. Trade is disturbed and regular industry is injuriously affected. The dealers and millers, who are living on contracts made on the basis of such market fluctuations as are at all times to be looked for, find themselves heavy losers in consequence. But the great army of suffering victims are the bread-winners and bread-eaters.

The miller has to pay more now for his wheat, and consequently has to ask more for his flour. Hence the baker must put up the price of his bread, inasmuch as he has to pay more for his flour. And so every family that buys a loaf of bread, and every laboring man or woman who buys a few pounds of flour, has to pay a larger price for it than he or she otherwise would; that is, has to pay for one of the chief necessities of life more than it is worth, and simply to help enrich a few extortioners.

It is precisely the same way with coal. A few railway companies that happen to be situated so as to have the power form a combination to control the coal production. By the same methods they keep down the amount of coal used for a certain period, and thereby restrict or forbid its sale in obedience to the constant demand. They seek to create a coal famine in order to force up prices and compel consumers to empty their money into their own already stuffed pockets. Production for the time being limited, of course the supply runs short. Hence there is not a single person who is unaccustomed to lay in a stock of coal during the summer or fall that is not pinched for fuel to keep warm and to cook by. Besides this, thousands of miners have to submit to reduced wages in consequence of diminished production, or are driven from work to sheer idleness. There could not well be a more cruel treatment of innocent persons in both cases. All consumers alike are placed in the undesirable position of tribute payers to the extortioners who are thus able to put their hands into the pockets of their victims. But the case is always the hardest for the needy wage earners, for the families who live as best they can in tenement houses, for hard-working washerwomen, all of whom have to buy their coal by the pailful or the basket, because they never can get enough money together to buy it in larger quantities.

The poor, in fact, are the real victims of these respectable robbers. They are the ones least able to stand the pressure of the demand made on them. The burglar and the highway robber robs only those who have something to lose, and are therefore better able to stand this loss; but the robbing speculator who gets up a corner in the necessities of life actually pulls fortunes out of the pockets of poor working people, and feels no compunctions at the process. People who have to toil early and late, who are struggling for a bare subsistence, are summarily called on to hand over the little remnants of their earnings and savings to swell the gains of unscrupulous and unfeeling speculators. It is a wrong that can not easily be compressed within the limits of a definition. It almost surpasses description. Well may the judge referred to characterize it as "respectable robbery."

He said much more than this respecting it. He declared that the law would not sanction this sort of combination to put up the prices of the necessities of life to consumers. "It will not," he said, "permit parties owning property and contemplating the purchase or sale of more of it to combine together to keep it off the market and oblige the public to pay a larger price for the article than it would otherwise bring. Such a combination is an unlawful conspiracy, punishable as a crime." We should be glad to see it actually punished in some other way than by simply declaring contracts thus entered into for the purpose of robbing the public, invalid. It is time that the people were rescued from merciless speculators and

conspiring corporations, that would take their money at the expense of life itself.—*Massachusetts Ploughman.*



A grain elevator at Tiara, Ohio, was destroyed by fire Jan. 18.

The decease is announced of Ferdinand Hanny, brewer at Cape Girardeau, Mo.

Thos. Riley, residing near Forest, Ill., had his hand torn off in a corn sheller.

Ogden F. Perot, of the firm of Francis Perot's Sons, maltsters, Philadelphia, Pa., has recently died.

The grain elevator of J. E. Fowler, at McLouth, Kan., recently burned. Loss \$5,000; insured for \$3,500.

J. W. Buky, grain dealer, Nicholasville, Ky., was recently burned out. Loss \$6,000; insurance \$3,500.

L. F. Domstreik, formerly a member of the firm of P. Kling & Co., brewers at Detroit, Mich., has died.

Gooding's grain warehouse, with 500 bushels of wheat and flax, at Watertown, Dak., was destroyed by fire Jan. 21.

The grain elevator of W. D. Cross, at Campbell, Minn., was recently destroyed by fire. Loss \$8,000; insurance \$2,000.

Ed Walters, an employe in a grain elevator at Burney's Station, Ind., was found dead Jan. 21. Cause of death not known.

A laborer named Barnes, on Jan. 25, fell from quite a height in Elevator "B," at Duluth, and was quite seriously injured.

Issy Landa, hay and grain dealer at San Antonio, Tex., was burned out Jan. 22. His loss is very heavy, and he carried only \$3,000 insurance.

Six thousand bushels of corn belonging to Lampson Bros., of Chicago, stored in cribs near Lafayette, Ind., were burned, causing a loss of \$2,000.

S. S. Strayer, of Dallas Center, Iowa, had his arm broken Jan. 27 by being caught in the cogs while removing some obstruction from a corn crusher.

The grain elevator belonging to S. & E. Taylor, at Taylor's Station, Ind., took fire from a passing engine Jan. 27, and was burned. The loss will be about \$1,500.

The grain elevator at Marysville, Kan., containing 9,000 bushels of grain, and owned by Himebaugh & Merriam, of Omaha, Neb., was burned Jan. 27. Loss \$6,000.

The brewery, dry-kiln, malt house, and residence of William Lenze, at Sauk City, Wis., were burned Feb. 9. The fire originated in the kiln. Loss \$10,000; no insurance.

Harry Dobbs, the junior member of the firm of Salls, McLean & Co., grain dealers at Kansas City, Mo., has absconded with between \$8,000 and \$12,000 of the firm's money.

Mr. J. H. Gehlen, a prominent business man of Le Mars, Iowa, and largely connected with grain and milling interests there, has very mysteriously disappeared from his home.

B. S. Rhea & Son's grain and hay warehouse, with its contents, at Nashville, Tenn., was completely destroyed by fire Jan. 16. Loss on stock and building \$16,000. Fully insured.

The elegant residence of Jewett M. Richmond, at Buffalo, N. Y., was burned Jan. 18. Loss \$100,000; insurance \$17,000. Mr. Richmond was formerly connected with the elevator and grain business.

The large grain storehouse belonging to H. L. Roach's Sons, at Athens, Ohio, was recently destroyed by fire, entailing a loss of about \$1,800. They are now rapidly completing a new and larger building.

Chandler J. Wells, ex-Mayor of Buffalo, N. Y., died in that city Feb. 3. He was one of the pioneers of Buffalo, and had been actively engaged in harbor improvements, having built five of the large elevators of that city.

A cornmeal stone burst with great force in the Alliance Mill Elevator at Denton, Tex., Jan. 21. Two men were badly hurt, one not expected to recover. Pieces of the stone flew all over the elevator, tearing everything before it.

The grain elevator of E. Augush, at Arapahoe, Neb., was destroyed by fire Feb. 13. About 100 bushels of oats and 400 bushels of wheat were burned. The building and machinery, valued at \$2,000, are a total loss. Insurance \$2,700.

The grain elevator of J. B. Canterbury, at Galesville, Wis., was recently burned. Loss \$12,000; insurance \$5,000. Much of the grain belonged to farmers, and the question has arisen whether Mr. Canterbury can be obliged to make good the losses they sustained.

The large grain elevator situated on the line of the Wabash Railroad, at Petersburg, Ill., owned by Rourke & Rainey, was burned Jan. 31. There were 12,000 bushels of corn and about 3,000 bushels of wheat stored in the bins, of which a portion will be saved. The loss on the

building, machinery, etc., is about \$12,000; the insurance on the building is \$6,500 and on the grain \$3,000.

Hiram Center, of Lake City, Minn., while in the loft of his elevator recently, made a misstep and fell twenty feet, striking on his shoulder, severely fracturing it.

On the morning of Feb. 6, while a crew of men were at work in an elevator at West St. Paul, Minn., a charge of blasting powder was prematurely discharged, resulting in the death of two laborers, Henry Peterson and Jene Monson, and the serious injury of Carl Monson.

The boiler connected with the grain elevator at Newport News, Va., owned by the Newport News and Mississippi Valley Ry. Co., exploded Jan. 25, instantly killing assistant fireman, Sam'l Robinson, and badly scalding and burning Robt. McKae and three colored men. The total damage amounted to \$10,000.

### THE DECLINE IN VALUE OF BRITISH FARM PRODUCTS.

Mr. Wm. C. Little, ex-chairman of the London (Eng.) Farmers' Club, publishes in the *Farmers' Almanack* a series of tables showing the decline in aggregate values of certain staple British farm products during two periods of ten years each, from 1866 to 1875, and 1876 and 1885, inclusive, together with average aggregate value in 1885, and the average price of the same in 1885, from which we extract the following figures:

	Average of the 10 years 1866-75.	Average of the 10 years 1876-85.	Value in 1885.
Wheat.....	£33,530,000	£21,960,000	£15,922,000
Barley.....	18,964,000	16,994,000	14,901,000
Oats.....	16,911,000	15,481,000	13,941,000
Beef.....	21,544,000	22,872,000	22,048,000
Mutton.....	23,136,000	21,596,000	18,284,000
Wool.....	11,833,000	6,888,000	4,951,000
Total.....	£424,918,000	£105,741,000	£90,047,000

The average price per quarter (8 bushels) of wheat, oats, and barley in these different periods is given as follows:

	Price per qr. Average for the 10 yrs. 1866-75.		Price per qr. Average for the 10 yrs. 1876-85.		Average price per quarter for 1885.
	s.	d.	s.	d.	s. d.
Wheat.....	54	7½	43	9½	32 10
Barley.....	39	2	35	5	30 1
Oats.....	25	10½	22	8½	20 7

Of beef per ton the average price for the first ten years was £58 9s. 7d., for the second £57 5s. 8d., and for 1885 £49 17s. 6d. per ton.

Of mutton the prices per ton range as follows: For the first ten years £63 8s. 11d., the second £64 18s. 6d., and for 1885 £55 2s. 6d. These figures show that of the above named agricultural products the value was less by £35,000,000 in 1885 than on the average from 1866 to 1875. Taking out war prices in this country during the war and in the years succeeding, based on a depreciated currency, and reducing prices to a gold standard, the farmers of this country, much as they complain, have seen no such reduction in prices as have those of their brethren in Great Britain.

### TAKING IT OUT OF THE OTHER FELLOW.

Recently there was a war in wheat prices on two roads between Minneapolis and Wahpeton, Dak. The Manitoba Road has two lines running in here. The Minneapolis & Pacific has built a line between the lines of the Manitoba. When the new road began business about six weeks ago a cut of 3½ cents per hundred for wheat shipments was made. The elevators on the Manitoba Road were all full, and the grain men wanted the Manitoba to carry wheat for the reduced rate. This the Manitoba refused to do, claiming, it is said, that the wheat was stored in the elevators when the old rates were in force, and must be carried out at the old rates. Meanwhile wheat has been going to the Minneapolis & Pacific Road for transportation. Quite a war in prices was stirred up at one or two towns along the lines, and in one place the price was run up as high as \$1 a bushel. One of the new elevator companies sent agents through the country and contracted with the farmers for their wheat at 68 cents per bushel. This wheat was hauled during the war of prices, and lively bidding ran the price up as high as \$1 per bushel. The parties who had contracted for the wheat did so with a distinct understanding with the farmers that the contract price only was to be paid. After a delivery there would be a change of drivers, and the load of wheat would then be taken to the other elevators and sold at 80 cents a bushel. While one company was sizing up the other as a set of fools for paying \$1 a bushel for wheat, the new company was clearing 12 cents a bushel on the same grain and making it out of its rivals.



## WATERWAYS

The Suez Canal is to be made ready this month for night traffic through its entire length by steamers provided with electric lights.

Vessel owners at Buffalo expect a busy and prosperous season. It is believed that the Interstate Commerce Bill will give lake traffic an impetus, and that Buffalo will "boom" as she never boomed before.

Col. Comstock, of the Army Board, once said that the improvement of the Mississippi on present lines would cost from one-half to one billion dollars, a sum nearly equal to the National debt at the present time.

A concurrent resolution asking Michigan senators and representatives in congress to take speedy action upon the measure for the purchase by the general government of the Portage Lake Canals has been unanimously adopted.

At St. Paul a committee of the Chamber of Commerce has proposed a report recommending memorials to the legislatures of Wisconsin and Minnesota in favor of an appropriation for a canal to connect Lake Superior and the Mississippi River.

The Chicago Board of Marine Underwriters established the following rates of insurance on grain cargoes, which went into effect Feb. 1, including harbor risk in Chicago during the winter: To Lake Huron ports, Sarnia and Detroit, 90c.; Georgian Bay ports, \$1.10; Lake Erie ports, \$1.10, Ontario, \$1.20; Ogdensburg, \$1.30; Montreal, \$1.85.

The Rochester, N. Y., *Democrat and Chronicle* shows its level head in the following: "Common prudence should dictate preparation in time of peace for the defense of the lake cities as well as the coast. The representatives from New York will do well to urge with energy the building of the Hennepin Canal as a matter of common safety, without reference to its commercial importance."

Shipments of grain to Europe from the port of Montreal during last year increased 40 per cent. As compared with 1885, the increase in the shipments of wheat, which was almost entirely American, arriving via the Welland Canal and St. Lawrence route, was 64 per cent., and in corn 90 per cent. Shipments during 1886 were as follows: Total shipment of grain of all kinds, 17,000,000 bushels; of wheat, 7,000,000 bushels; and of corn, 4,500,000 bushels.

During the past season there were 150 propellers and 306 sailing vessels and lake barges in the port of Kingston, Ont., which transhipped 7,688,926 bushels of grain. The cost of transhipping that quantity of grain, and the amount expended by vessels, barges and their crews for outfit and supplies and the amount expended by the transportation and forwarding companies for building and rebuilding and repairing, is estimated at \$160,000. This refers only to the through transshipment of grain. There are also the transshipment of deals, and the coal, barley, lumber and iron ore trades to and from that port, and the square timber trade at Garden Island and Collins' Bay, as vessels discharging at those places get their supplies directly or indirectly from this city, so that the amount expended by vessels engaged in these different trades will equal or exceed the amount already stated.

The Board of Government Engineers was instructed to investigate the Sturgeon Bay Canal and report as to the necessity of its purchase and control by Congress. The Chief Engineer of the Board has presented a report in which he says: "If the barrier between Green Bay and Lake Michigan were now in its natural condition, the construction of a canal between them or near the line of existing canal would be the proper work to be done by the United States, but the United States should not be made responsible for an insufficient canal incumbered with a heavy toll, which results are due to an inefficient agency not contemplated by the original act of Congress; that the grant of land in the state of Wisconsin was sufficient to have built the canal, and should the United States assume control no payment will be due for its construction and maintenance; that owing to its inadequate depth the canal has restricted commerce, and whether the government assumes control of the canal or not, the tolls should not exceed the actual costs of its operation and maintenance."

The citizens of Cumberland have plainly resolved that the Chesapeake and Ohio Canal, as a commercial enterprise, shall not be "buried" by a combination of railroad corporations, senators and financiers without a desperate and final protest. The latest move of the Piedmont & Cumberland Railroad has been to "completely environ the terminus of the canal from the basin wharf to the end of the freight dock, and thus completely cut off all communication between the business portion of the city and the canal." These are the words of a special committee appointed by the Cumberland City Council to investigate the matter, and it is significant to note the rider appended to the report: In view of the great interest which the people of Cumberland feel in maintaining the corporate existence of the Chesapeake & Ohio Canal as an independent line of transportation, and especially in view of the growing conviction that insidious efforts are being covertly made to absorb it upon the part of certain railroad interests, and the more painful conviction that the present management of the canal appears to be in accord with this scheme of absorption, etc., your committee begs leave to recommend

that a public meeting of the citizens of Cumberland be held at an early day, etc. The purpose of this meeting is to give expression to public sentiment as to the critical state of the canal, and to devise some means for securing its existence as an independent highway.

On Feb. 1 Senator Cullom introduced an amendment to the sundry civil appropriation bill, directing the secretary of war to cause a survey to be made of the Illinois and Desplaines Rivers, from LaSalle to Joliet, with a view to the improvement of those rivers, so as to maintain a waterway 160 feet wide and 7 feet deep between the places named. The secretary is also directed to cause a survey to be made of the canal and locks from Joliet to Lake Michigan, at or near Chicago, with the dimension of the same as those specified for the waterway, and with locks 35 feet long and 75 feet wide. He is further required to institute surveys for the canal 80 feet wide and 7 feet deep, with locks 170 feet long and 30 feet wide, from the Illinois River at or near Hennepin to the Mississippi River at or above the mouth of Rock River. One hundred thousand dollars is appropriated for these purposes. It is further directed that the work be not commenced, nor any of the money expended until the state of Illinois cedes to the United States all the right and titles in any improvement now existing on the Illinois River, and to do so much of the Michigan Canal as may be required by the United States.

### MICHIGAN WHEAT.

The Michigan Secretary of State, who has charge of matters relating to crop investigations, etc., in that state, has made extended inquiries as to the cost of producing wheat, oats, corn and hay for the crop of 1886, continuing a practice of two years next preceding. For wheat the area covered by the reports was 11,963 acres, or about 1 1/2 per cent. of the wheat acreage of the state. The cost per acre, including wages for labor, fertilizers, harvesting, marketing, 7 per cent. interest on investment, insurance, taxes, repairs, etc., was \$14.20; deducting for value of the straw, and rental value of dwellings, leaves \$11.85 per acre. The average cost is stated as 62 1/2 c. per bushel, and the average value on Jan. 1 a fraction below 74 cents. Whether this average cost is exclusive of the value of the straw, etc., is not made clear, as the average yield on the area represented is not stated. The department of agriculture estimate of the Michigan wheat crop in 1886 is 16 bushels per acre for the state; applying this average to the \$11.85 would give 74c. per bushel as the net cost, which almost exactly corresponds with the reported average value on Jan. 1. The report says: "If the expenditure for wages, fertilizers, seed, interest, insurance, taxes and repairs, less rental value of dwellings, be considered capital invested in the crop, the net profit on the investment is 16 per cent" for the state. But it seems evident that these conclusions are arrived at from data which does not fully represent the average for the state as to yield.

### BULKING GRAIN.

The special committee of the Merchants' Exchange, appointed to confer with the grain dealers and elevator authorities on the question of bulking grain, met last week and held a long conference. The grain committee and representatives of the elevators were also present and the subject was thoroughly canvassed. The discussion was very animated, and appears to have been entered into with a will by the members of the special committee especially, as it was composed mainly of strong advocates of bulking the grain. The only action taken was the passage of a resolution declaring it the sense of the meeting that No. 1 hard Duluth wheat should be bulked, and asking the elevator authorities to bulk it. The committee voted unanimously in favor of the resolution, but the elevator representatives, claiming to act for others who might think otherwise, did not vote.

The discussion was so earnest that it was continued after the meeting adjourned. The advocates of bulking maintained that they were certain to carry their point this year, and some of them went so far as to say that if the present elevating company would not yield to the pressure there would be a new one formed that would. It was also argued that the company could not afford to reject this request. It was so generally joined in by the grain interests, and the elevator men were so divided against themselves, that the company would certainly go to pieces if bulking was not adopted. Car grain, it was said, was already being bulked in more than one elevator.

The request will be considered by the elevator authorities.

The grain dealers who are not owners of elevator property are watching the stir in the line of added storage capacity and are beginning to cipher out a possible rupture of the elevating association, which would, of course, insure a reduction in rates. The Frontier, Lake Shore, International, and Coatsworth elevators will all be out of the company at the opening of navigation, no doubt, and if changes are made in the other houses there will have to be a readjustment of shares at any rate, so with a disturbing element within their ranks, and a larger one outside, the rate question will be carefully watched by the grain men.

That there is going to be a scramble to get hold of an increased share of the lake business appears to be certain. Everywhere the belief seems to be that the season is to open with a boom, and he who is not prepared to strike it will get left. Captain A. A. Swan, who has been in Chicago surveying craft on the Illinois Canal for the Continental Insurance Company, has returned. He reports an

activity there that amounts to something of a craze. Everybody is eager for the season to open.

The Merchants' Exchange committees on grain and grain inspection were in joint session this week, talking over the appointments to the office of chief inspector and weighmaster, which was not made at the trustee meeting last week. There is no dissatisfaction with the present appointees, but some changes in the offices themselves are proposed. As both are paid by fees, they are neither an expense nor a revenue to the Exchange, and the weighmaster is hardly more a Merchants' Exchange official than that his appointment is a statement of an entire confidence in him. There has been an effort to make the weighing an official matter. If this "official" idea is adopted the weighmaster will have to weigh the grain out of the elevators as well as in, and probably become responsible for his work, just as the inspector now is for his grading. Since the disclosures of questionable practices in one of the elevators, there has been an additional demand made for official weighing, and some of the new elevators have already adopted it.

The transactions of the committees, being only advisory to the trustees, were not made public, but it was learned that the present officers, Mr. Junius S. Smith, weighmaster, and Mr. Conway W. Ball, chief inspector, were recommended to reappointment. An objection raised to the amount of the latter's profits, about \$4,000 a year, was overruled, and the recommendation was that he be reappointed on the former basis.—*Buffalo Express*.

### DONNELLY'S GRAIN RATES.

The bill introduced in the state legislature by Mr. Donnelly to regulate what rate the railroads of the state shall charge for the transportation of grain does not, says the St. Paul *Pioneer Press*, meet with the approbation of the local officials in the least. They are all opposed to it, and say the schedule of rates proposed by the bill are ruinously low—so much so, in fact, that if they were forced upon the companies they would be compelled to go out of the transportation business entirely. The following comparison with the rates now in effect upon the several state roads will show what a marked reduction will be made should the bill pass as it now reads:

Rates proposed by the pending bill: One hundred and seventy-five miles, 7 cents per 100; 200, 9; 250, 11; 300, 13; 350, 15; 400, 17.

Manitoba Rates—Morris (157 miles), 15 1/2 cents; Campbell (200), 17 1/2; Felton (250), 20; Crookston (300), 21; Stephen (350), 22; St. Vincent (400), 23.

Northern Pacific Rates—Villard (160), 14; Staples Mills (168), 14 1/2; New York Mills (198), 16; Hillsdale (248), 19 1/2; Moorhead (275), 20.

Milwaukee & St. Paul—Montevideo (144), 14; Odessa (183), 17 1/2; Big Stone (190), 17 1/2; Kinbrae (284), 19; Airlie (289), 20.

Omaha—Heron Lake (160), 14; Worthington (178), 15; Luverne (211), 18; Beaver Creek (219), 18.

The rates quoted above are all from the points mentioned to St. Paul and Minneapolis.

The maximum rate on the St. Paul & Duluth for either grain or flour is 12 cents per 100 pounds, St. Paul to Mouse Lake. The rate, St. Paul to Duluth, upon through shipments is 7 1/2 cents. During last summer this rate was as low as 2 1/2 cents. This was occasioned by the competition of the all-rail routes. The average rate was 5 cents per 100 pounds. On the Minnesota & Northwestern the maximum grain rate is 13 cents per 100 pounds from Tappan to St. Paul, a distance of 106 miles. The rate from Lyle to St. Paul, however, a distance of 109 miles, is but 12 cents.

The following table will show a comparison between the rates proposed by the Donnelly Bill and those enforced by the railroad commissioners of other states:

Dis-	Don-	Ne-	Mis-	Ill-	Iowa,	Kan-
tance.	nelly's	braska.	souri.	inois.		sas.
Figures.						
150.....	7	16	15	13 1/2	19	16
200.....	9	20 1/2	19	15	22	18
250.....	11	22	20	16	22	19
300.....	13	28	21	17 1/2	25	20 1/2
350.....	15	46	22	18	25	22
400.....	17	50	23	19	25	24

The Nebraska rates are taken from the tariffs of the several roads operating in that state. The others were obtained from the state railroad commissioners direct. It will be noticed that the lowest rates quoted are those enforced by the Illinois commission. The reason the rates in that state are so low for the long distances is that the state is not more than 200 miles wide, and that from the southern portion of it all grain is shipped east. A prominent official said yesterday:

It is unreasonable to ask the railroads of Minnesota to make lower rates than other Western states for several reasons. The most important are that the cost of the transportation, owing to the extremely cold weather in winter, is much heavier than in states further east and south, and also because Minnesota, so far as the cultivation of grain is concerned, is almost exclusively a wheat state. In Nebraska, Kansas, Iowa and other Western states corn is more generally cultivated, and the tonnage from one acre of land sown with corn is much greater than from a similar piece of ground sown by wheat. I don't think Mr. Donnelly's bill will ever become a law as it now reads.

Hancock & Co., of Oakland, Iowa, have treated their engine and boiler room to a general overhauling, and replaced the old with new pipes, valves, etc. All of which were purchased from Geo. L. Jarrett, Des Moines, Iowa.



## THE LAW.

### Railroad Discrimination—Rebates.

A contract by a railway company with a single shipper, whereby he is allowed, upon shipment of his goods at the regular tariff rates, to receive back a special rebate extended to no other shipper, or to not more than one other shipper, was held by the Supreme Court of Illinois to be unlawful and void, as being contrary to the Illinois act of 1873, against unjust discrimination.—*Indianapolis, Decatur & Springfield Railroad Co. vs. Erwin.*

### Mortgaged Grain.

Grain handlers will be interested in a recent decision by the Supreme Court of Kansas concerning uncertainty of description in the case of grain covered by chattel mortgage. In the case of Clark against Voorhes it was held that where a chattel mortgage was given upon a certain number of bushels of grain out of a larger quantity which was not uniform in quality and value, the whole of which remained in the possession of the mortgagor until it was attached by his creditors, and where the description in the mortgage as well as the mortgage itself gave no clew by which the part intended to be mortgaged could be distinguished by third parties from the remainder, the mortgage should be held void for uncertainty.

### Common Carrier—Bill of Lading.

All stipulations made in this country, of whatever form, designed to secure, directly or indirectly, the exemption of a common carrier from the consequences of his own negligence, whether the carrier is a domestic or a foreign ship, are equally illegal and void under the Federal law.

Where a number of cattle were shipped on the British steamship Brantford City for transportation to England, under a bill of lading which excepted liability for loss arising from the negligence of the carrier, and while on the high seas, the greater part of the cattle died through the carrier's negligence, it was held, on suit brought in this country against the vessel, that the law which governed the case was the law of the Federal courts of this country. And that as those courts do not permit a carrier to exempt himself from the consequences of his own negligence the steamship was liable for the loss.—*U. S. District Court, Southern District of New York, Dec. 21, 1886.*

### The Minnesota Elevator Law.

The Supreme Court of Minnesota has handed down a decision in the case of the state against the Chicago, Milwaukee & St. Paul Railroad, an action to recover a penalty from the defendant appellant for refusal to permit one Barry to construct and operate on its land at Blooming Prairie a warehouse. According to the provisions of Chapter 188, laws of 1885, the law provides that every railroad company doing business in the state should, upon application, permit any person, company or corporation, for an annual rental of \$1, to construct, maintain and operate any elevator or warehouse at any of its way stations, to be used for the purpose of receiving, storing and handling grain, and such permissions shall be granted without regard to the capacity of such elevator or warehouse, and without discrimination as to persons. The court below overruled a demurrer to the complaint, and defendant appealed. The Superior Court overrules the lower court, and holds the law in question to be unconstitutional.

### Discriminating Charges.

A case was passed upon Feb. 11 by the Iowa Board of Railroad Commissioners, which will have an important bearing in that state. It relates to discrimination of the long and short haul and takes steps to prevent any further action of the kind. The case is that of the state of Iowa against the Chicago, Burlington & Quincy Railway. It was instituted on a complaint made by Gov. Larrabee as to the discrimination on rates for hauling coal. The state paid for hauling coal from Cleveland, Lucas county, to Glenwood, for the use of the Asylum for Feeble-Minded, \$1.80 a ton; from the same place to Council Bluffs, twenty miles further, for the use of the Deaf and Dumb Asylum, the rate was \$1.25 a ton. The view of the governor was that since the rate to Council Bluffs was voluntary it was a reasonable charge, and being higher for a shorter distance was exorbitant. The railway company contended that the rate made at Council Bluffs was very low and gave them but little excess in cost, because the active competition compelled them to cut rates. They said at Glenwood they had to return empty cars and from Council Bluffs they did not. The governor in reply to that statement of the railway wrote to the board, stating that the rate to Council Bluffs was higher than their average rate and more than other roads charged, and said that coal ought to be carried cheaper than any other product. The commission discussed the matter fully and closed their findings with these words: "The rule now being as to interstate commerce that the charge should not be greater for a shorter than a longer distance, to allow a different rule for local freight would throw all the inequalities of which so much complaint has been made upon domestic commerce, to which we cannot consent. The commissioners are satisfied that the section will be en-

grafted into the state legislation, and that the question may as well be met now as any time. With this view, while possibly they entertain some doubts as to its effect on the general shipping interests, the commissioners would advise the Chicago, Burlington & Quincy Railroad Company to revise its tariff to comply with the provisions of the interstate commerce law."

### HOW IT WILL OPERATE.

Gambling on the quotations of the Chicago Board of Trade through the bucket-shops has cut into the business of the regular grain exchanges from the Atlantic to the Pacific coasts. The enactment of state laws for the suppression of bucket-shops and the rigid enforcement of the same is the best plan that can be suggested for the recovery of the business that has been diverted into illegitimate channels. *Daily Business* has proposed a bill which reaches into the bowels of the question, and its enactment by state legislatures will inevitably be followed by improved general business. Through the personal endeavors of a Kansas City commission merchant the Riddle bill has been introduced in the Missouri legislature, and there is a fair prospect of its passage. Similar efforts on the part of commission merchants in this and other states would be attended by like results.

The following analysis of the proposed bill for the suppression of bucket-shops and bucket-shopping, as printed in *Daily Business* on Thursday, Jan. 20, 1887, will make the scope of the measure comparatively clear to the lay reader:

Section 1 makes it a penalty for any person, copartnership or corporation to keep and maintain a place of any kind, or under any name, where the practice of bucket-shopping is carried on or permitted, or where grain, stocks, etc., are pretended to be dealt in, without any bona fide intention of receiving or delivering property. It also provides that any person who shall violate the provisions of this section a second time may be imprisoned in the county jail for six months, in addition to the penalty of \$500 for such offense.

Section 2 declares all contracts, or pretended contracts, in violation of the provisions of Section 1, to be not only gambling, but criminal contracts, and imposes a penalty of not less than \$500 nor more than \$1,000 for the violation of this provision.

Section 3 provides that it shall not be necessary, in order to commit the offense prohibited in Section 2, that the buyer and seller shall mutually agree to do any of the acts prohibited in Sections 1 and 2, but that the offense shall be complete by any person offering or pretending to do any of the acts prohibited by those sections, or by any persons who shall communicate, receive, exhibit or display in any manner any offer or intention to do any of the prohibited acts, and for such offer or pretense the person so offending shall forfeit to the common school fund the sum of \$500, to be recovered in a single action.

Section 4 is the broadest and most comprehensive of any of the sections of the proposed measure. It requires that every person acting in the capacity of a commission merchant or broker shall upon demand furnish to his principal or customer a written statement containing the names of the parties from whom, as such commission merchant, he has bought or to whom sold any grain, provisions or stocks, etc., for account of his customer, the time when, the place where, and the prices at which he as such commission merchant has bought or sold, and the refusal of any commission merchant or broker to furnish such information to his customer shall be prima facie evidence of the fact that the dealings of the commission merchant were not conducted in a legitimate manner upon open market. This would preclude the business of shuffling between the avowed bucket-shop keeper and the quasi-commission merchant or broker. The logic of this section is that no commission merchant who had failed to execute any order received by him as such could furnish the information required of him as such commission merchant upon the demand of his customer, and hence would have violated, necessarily, the provisions of some one of the first three sections of this bill. It would not only be hazardous but ruinous for any legitimate commission merchant to collude with any bucket-shop proprietor to further the bucket-shop business, because they would both be compelled to show in writing all about the transactions or confess that they had been guilty of the offenses prohibited in the first three sections of this bill.

Section 5 makes the owners of any buildings in which any bucket-shopping is carried on liable for the penalties adjudged against the persons guilty of the prohibited offenses. It also defines the intention of the act to be to punish and prohibit the business of bucket-shopping not only by those who ostensibly carry it on, but by commission merchants and brokers who, under the guise of legitimate trading, carry on really the bucket-shop practice. This section further requires the judges of the circuit courts of this state at every term to require the grand jury to give special attention to offenses committed under this act.

The operations of the principles of this bill (which cuts both ways) would make it almost impracticable for any delinquent speculator to ever maintain successfully a plea of gambling in a suit brought by a commission merchant against his customer to recover for losses, because the measure requires that there shall be a record of every incident of the transaction from the beginning to the close, and that all the acts and relations of all the parties shall be within the domain of legitimacy, and that nothing can be done by commission merchants which the courts do not and have not always sanctioned as necessary acts founded upon commercial convenience.—*Chicago Daily Business.*

## THE EXCHANGES.

Memberships on the New York Produce Exchange have been quoted at about \$2,450.

Both the Chicago Board of Trade and its small but vigorous young neighbor have prohibited all privilege trading.

Sales of wheat on the "call" in the San Francisco Produce Exchange amounted to 90,822,000 bushels the past seven months.

The Chicago Open Board of Trade will, it seems probable, abolish all grain trading and transform the Board into a stock exchange.

Des Moines, Iowa, will erect a Chamber of Commerce, which will serve as the headquarters of her grain, stock, and kindred interests.

The Chicago Open Board will sell 120 additional membership tickets at \$200 each, which will about pay off all the present indebtedness.

One of the strongest blows the Chicago Board of Trade ever received was the abolition of the uniform commission rule. And now a regular rate of commission charges is almost assured for the future.

The Chamber of Commerce Company and the Chicago Board of Trade will doubtless compromise their differences, growing out of the lease of the old Board of Trade building, by the payment to the Chamber of Commerce of \$75,000 cash, and the surrender of 1,050 shares of stock.

At Montreal, on the 7th inst., a meeting was held of French gentlemen interested in establishing a French Board of Trade, a constitution was adopted, and it was decided to call the association the Chamber of Commerce of the District of Montreal, and to fit up a reading room and exchange for the members. *Le Moniteur du Commerce* was made the official newspaper organ of the Chamber. Resolutions demanding that canal tolls on grain be reduced to two and one-half cents per ton and demanding the deepening of the channel and the widening of the canals were adopted.

Owen Fergusson was elected President of the Duluth Board of Trade, with R. W. Baker as Secretary, and F. W. Paine as Treasurer. President Fergusson appointed the following standing committees: Finance, F. S. Daggett, A. D. Thomson, E. A. Gilbert; transportation, A. D. Thomson, George Spencer, George H. Dodge; harbor, W. T. Hooker, B. R. Clarkson, John McLeod; elevators, George Spencer, A. D. Thomson, W. T. Hooker; telegraph and signal service, George H. Dodge, George Spencer, John McLeod; judiciary, O. C. Hartman, W. W. Davis, F. S. Daggett; rooms, supplies, and printing, E. A. Gilbert, W. W. Davis, O. C. Hartman.

The directors of the Chicago Board of Trade have taken a firm stand upon the enforcement of the rules. One rule fixes the hour for closing the day's business at 2:30 o'clock. At that hour the bell rings and business in the market closes. It has been the habit of a large number of members to spend ten or fifteen minutes after the bell rings in getting in a few extra trades. The officers have for years gone into the pits and dispersed the knots of speculators who did not know when to quit. In the Open Board the officer uses a huge gong to drive the traders out. The directors issued orders to Officer Harris to report the names of offenders, and one day recently eight of them were served with notices to stop.

The Board of Managers of the New York Produce Exchange, on Feb. 14, followed the example of the Governing Committee of the Stock Exchange by declaring the put and call business illegitimate. It has recently assumed large proportions in the grain trade, and there was no express rule against it. The floor rule adopted declares that any broker buying or selling privileges known as puts and calls, or who shall, under the rules of the Exchange, receive or margin such contracts, shall be deemed guilty of misconduct and disciplined. The put and call brokers are loath to give up their profitable trade, and they intend to rent a room somewhere near the Exchange, and to continue their dealings. Most of the puts and calls on stocks are done on the New street curb-stone.

A dispatch from Detroit says: "The public was startled yesterday to learn that in the opinion of many members of the Detroit Board of Trade the death-knell of the organization has been sounded. It is authoritatively stated that at present a number of the members who are not making expenses are eking out a living by making their fellow-members contribute to their support. Last year some of the members of the Detroit Board concluded that many interior buyers were sending their grain to Toledo on account of the lower charges for handling there. Toledo charged one-half cent commissions and one-half cent elevator charges, each item being just half the Detroit charges. The Detroit men went to the railroads to get a reduction in the cost at the elevators. The railroads agreed to meet the Board half way, and as a result both charges were put down to the Toledo scale—that is, the Detroit members would have to do twice the business to make the same amount of money as before. As a matter of fact, the wheat trade during the last six months has scarcely exceeded that of the corresponding period of 1885 by 10 per cent. There are no profits in the business."



## ITEMS FROM ABROAD

A recent report from Buenos Ayres, Argentine Republic, states that the harvest of crops will be the largest ever reaped in the River Platte region.

The steamer Iron not long ago brought 5,100 tons of grain from Bombay to Liverpool, and this is said to be the largest cargo of wheat ever carried by a single vessel.

The United Kingdom imported last year only 118,674,000 bushels of wheat, against 155,432,000 bushels in 1885, and against an average of 135,323,000 bushels for the past year.

The French government has made large purchases of Russian oats for the use of the French cavalry, and has chartered a number of steamers to convey them from the Baltic ports to France.

The average price of wheat in England during 1886 was the lowest on record, being 9½ cents per bushel, against 90½ cents in 1885. The highest price paid between 1866 and 1886 was \$1.95½.

An English agricultural correspondent writes that the foggy, bad weather has very materially interfered with the sowing of new crops. The winter wheat has not been hurt, as it has been covered with snow.

The French Minister of Agriculture reports the wheat crop of his country last year as equal to about 311,700,000 bushels, being an excess of some 25,000,000 bushels over private estimates heretofore accepted as probably very near the truth.

The tax levied on Russian sacks in Germany is so oppressive to Russian merchants and others that they have petitioned the government for its removal, with prospects of success. It is stated, in spite of this movement, that grain is now mostly shipped to Prussia in bulk.

Some of the British authorities are showing a tendency to consider favorably a plan to tax imported breadstuffs. They claim that unless the British farmer and miller have some protection the day will come when the business will be completely swamped by foreign competition.

A change is contemplated in the Austro-Hungarian warehouse regulations, the design being to give a legal basis to usages which have developed in the course of the warehouse business. The Chamber of Commerce enactments will be incorporated with the existing usages of warehouses.

Owing to the short corn crop in the northeastern part of Mexico, grain will have to be imported from the United States. Not long ago that section of the country was shipping corn over the National Railway into Texas. Corn is now being sent over the National to Yucatan, via the Vera Cruz Railway.

The Australian wheat crop is reported as now safely harvested, yielding about 12 bushels per acre, and giving a total crop of about 12,000,000 bushels. Of this amount about 5,000,000 bushels will be available for export, or about three-fourths of a million bushels more than the surplus of the previous crop.

The *Mark-Lane Express* calls attention to the probably early supplies of wheat shipped and to be shipped from Australia, Argentine Republic and Chili to Europe. According to Mr. Walker, statistician, the average for eight years from Australia was 7,518,203 bushels, and from Chili 2,150,695 bushels. That from the Argentine Republic was of small account.

Australian mail advices to Dec. 22 are that New South Wales, Queensland, Western Australia, Tasmania, Fiki and New Caledonia will require 750,000 bushels of wheat to supply home wants. The other colonies, Victoria, South Australia and New Zealand will have a surplus for export of 13,000,000 bushels, showing a net surplus for export of 7,250,000 bushels.

By order of the Russian minister of domain, Mr. Skworzow, an agricultural authority, has prepared a treatise dealing with the diminution of the Russian wheat export to Germany. He recommends either an increase of tariffs on the Russian Southwest road or lowered rates on the roads leading to Königsberg in Prussia. He advocates also changes in regard to carrying grain in bulk.

Cheap wheat from America and India is rapidly cutting down the wheat fields of England and Scotland. Since 1881 the acreage of wheat in England has fallen 18½ per cent., while the decrease in Scotland is 25 per cent. The acreage of barley in England has been reduced 8½ per cent., but there has been a slight increase in the acreage of oats. In five years there has been a loss of 721,000 acres in the area devoted to wheat and barley.

The winter has been very severe in England. A great many thousand acres were not sown last fall owing to the early frosts, and 20 per cent. of the fields in the lower counties were covered with ice. The correspondent of the *Daily News* reports from Odessa that a "heavy, black, blighting" frost has covered the south of Russia where the fields have been bare of snow all winter. Other advices confirm this. In the central part of Russia heavy snows are reported. The official report of the wheat crop

of Hungary is a surprise. The average production for ten years has been a trifle over 90,000,000 bushels. A crop below the average was estimated last summer, but the official figures are 103,200,000 bushels against 113,120,000 bushels in 1885 and 114,444,000 bushels in 1884.

In 1885 Russia shipped to the United Kingdom 14 per cent. of its total wheat purchases, and India 14 per cent.; but in 1886 India shipped to the United Kingdom 16½ per cent. and Russia 5½ per cent. A few years ago India was not of sufficient importance even to be entered among the wheat-exporting nations, but now India is surpassed only by the United States. India also ranks largely ahead of all other nations but this as a shipper of cotton and of corn, and she leads all the outlying nations except Australia as a shipper of wool.

The importations of wheat from India have fallen off 10,000,000 bushels during the past nine months. The Australian wheat crop of last year is estimated to have been but 22,000,000 bushels, against 37,000,000 bushels the year before. The exports of wheat from St. Petersburg and Odessa, for the year 1886, were but 22,900,000 bushels, while for the preceding year the total exports were 43,000,000 bushels. From these figures it is safe to conclude that the entire surplus of American wheat will be needed in Europe before the coming of another crop.

The last issue of the London *Miller* says: "Another step has been taken in this matter by the London Flour Millers' Association, which has undertaken to try and settle this question on a plain and intelligible basis. The point at issue is simple enough. In the port of London there obtains a custom that grain in bulk shall be unloaded and weighed out at the expense of the consignee, whereas in the case of grain in sacks, or of flour, the costs of delivery fall upon the shipper. In almost every other port of the United Kingdom the same rule holds good, and usually applies, be it noted, to grain bulk cargoes as well. In November last the London Flour Millers' Association met and passed a resolution, which was afterwards embodied in a circular; and the signatories of this circular (who were numerous) pledged themselves to insist that in all bills of lading dated from the first of January, 1887, there should be inserted the words, 'Working out and weighing charges to be paid by the ship.' This step aroused a considerable amount of hostility on the part of the shipping interest, and the Association thought it well that a second meeting of the Association should be held to reaffirm and make clear the position which had been assumed. A special meeting accordingly took place on the 29th December last, when the resolution of November was confirmed with a slight verbal amendment, due notice of which the Secretary was requested to send to all factors on the London Corn Exchange, and to all brokers and sellers of grain c. f. and i. in London."

## FREE WATERWAYS.

The report of the board of engineers upon the relation to commerce of the two important waterways known as the Portage Lake and River Improvement Company Canal and the Lake Superior Ship Canal, Railway, and Iron Company Canal was sent to the House of Representatives on Jan. 25, by the Secretary of War. The examination was required by the last river and harbor bill. Items for the improvement and acquisition by the government of this canal, as well as the Sturgeon Bay Canal, were included in that bill, but were stricken out in conference and examinations ordered by way of compromise. The board recommends:

1. That the offer of the companies be accepted to transfer all right and title to the canal, the works of improvement on Portage River, the harbor works upon Lake Superior and Keweenaw Bay, with all lands and franchises connected therewith, free from all incumbrances, and involving no other payments for bonds or otherwise whatsoever for the gross sum of \$350,000.

2. That the route be made a free waterway of the United States subject to no tolls or assessments whatever. In the opinion of the board the price asked is reasonable and the companies are willing to yield to the popular demand for a free waterway as soon as they are protected from actual loss themselves.

The board calls attention to existing obstructions in the route and submits estimates for a navigable depth of sixteen feet with a minimum width of seventy-five feet; also, estimates for enlarged and safe entrances from Keweenaw Bay and from the lake.

The estimates are as follows: For extinguishing private titles, \$350,000; for opening the route, \$225,000; for entrance from Lake Superior, \$850,000; for entrance from Keweenaw Bay, \$220,000—aggregate \$1,645,000. When the needs of commerce require a depth of twenty-five feet an additional expenditure of \$730,000 will be required.

A similar report from the engineer board upon the Sturgeon Bay and Lake Michigan Ship Canal, connecting the waters of Green Bay with Lake Michigan, was also submitted to the house. In this report the chief of engineers says: As a result of a most careful and impartial examination of all the matters relating to the subject the board concludes: If the barrier between Green Bay and Lake Michigan were now in its natural condition, the construction of a canal between them on or near the line of the existing canal would be a proper work to be done by the United States, but the United States should not be made responsible for an insufficient canal incumbered with a heavy lien; results due to an inefficient agency not contemplated by the original act of Congress.

That the grant of land to the state of Wisconsin was

sufficient to have built the canal, and should the United States assume control no payment will be due for its construction and maintenance.

3. That owing to its inadequate depth the existing canal has only restricted importance.

4. That the canal is not a harbor of refuge in any proper sense.

5. That Sturgeon Bay is the true harbor of refuge, and to make it available it should be improved.

6. That the conversion of the bay into a harbor of refuge, accessible through the Sturgeon Bay Canal, may be regarded as a public necessity.

7. Whether the government assumes control of the canal or not, the tolls should not exceed actual cost of operation and maintenance.

## OUR WHEAT PRODUCTION.

Report of the National Department of Agriculture, exhibits the acreage and production of wheat in the different states in the past two years:

States.	Acreage.	Yield, Bu.
Ohio.....	3,686,468	40,362,000
Michigan.....	1,662,721	26,572,000
Indiana.....	2,721,526	40,255,000
Illinois.....	2,015,400	27,262,000
Missouri.....	1,662,721	21,986,000
Kansas.....	1,272,300	14,556,000
Kentucky.....	1,111,728	12,405,000
Tennessee.....	1,119,400	8,024,000
New York.....	680,493	11,093,000
New Jersey.....	144,528	2,260,000
Pennsylvania.....	1,435,506	18,255,000
Delaware.....	94,790	1,177,000
Maryland.....	586,287	7,194,000
Virginia.....	683,597	5,581,000
North Carolina.....	696,546	3,209,000
South Carolina.....	187,026	986,000
Georgia.....	395,954	1,690,000
Alabama.....	222,704	1,529,000
Mississippi.....	43,062	173,000
Texas.....	509,104	5,889,000
Arkansas.....	231,357	1,815,000
West Virginia.....	287,788	3,061,000
California.....	3,104,640	36,165,000
Oregon.....	884,640	11,133,000
Winter wheat.....	24,532,386	302,376,000
Minnesota.....	3,067,851	42,856,000
Wisconsin.....	1,281,018	14,725,000
Iowa.....	2,657,105	32,455,000
Nebraska.....	1,570,727	17,449,000
Dakota.....	2,675,350	30,704,000
Colorado.....	122,152	2,419,000
Washington.....	445,490	7,560,000
Nevada.....	5,570	72,000
Idaho.....	65,489	1,030,000
Montana.....	88,896	1,599,000
New Mexico.....	80,566	921,000
Utah.....	101,704	1,541,000
Arizona.....	22,010	279,000
Wyoming.....	3,339	63,000
Maine.....	41,537	600,000
New Hampshire.....	11,154	169,000
Vermont.....	21,567	410,000
Massachusetts.....	1,080	17,000
Connecticut.....	2,193	36,000
Spring wheat.....	12,273,798	154,842,000
Total.....	36,806,184	457,218,000

States.	Acreage.	Yield, Bu.
Ohio.....	2,015,952	20,593,000
Michigan.....	1,623,929	31,261,000
Indiana.....	2,518,455	26,659,000
Illinois.....	1,255,905	10,683,000
Missouri.....	1,517,598	11,275,000
Kansas.....	1,060,250	11,197,000
Kentucky.....	1,055,760	3,759,000
Tennessee.....	1,175,882	3,821,000
New York.....	687,867	10,565,000
New Jersey.....	143,097	1,395,000
Pennsylvania.....	1,380,294	13,325,000
Delaware.....	89,103	957,000
Maryland.....	580,482	5,534,000
Virginia.....	661,140	2,833,000
North Carolina.....	682,878	2,790,000
South Carolina.....	220,030	1,170,000
Georgia.....	453,375	2,817,000
Alabama.....	239,467	1,307,000
Mississippi.....	38,448	190,000
Texas.....	545,468	6,117,000
Arkansas.....	240,697	1,565,000
West Virginia.....	286,961	1,493,000
California.....	2,822,400	26,592,000
Oregon.....	876,102	13,916,000
Winter wheat.....	22,146,350	211,814,000
Minnesota.....	3,084,274	34,285,000
Wisconsin.....	1,362,785	15,665,000
Iowa.....	2,683,944	30,332,000
Nebraska.....	1,755,252	19,828,000
Dakota.....	2,187,084	27,913,000
Colorado.....	120,943	2,395,000
Washington.....	424,376	7,412,000
Nevada.....	5,570	103,000
Idaho.....	62,370	1,154,000
Montana.....	83,864	1,715,000
New Mexico.....	73,242	1,023,000
Utah.....	96,861	1,926,000
Arizona.....	21,578	303,000
Wyoming.....	3,180	66,000
Maine.....	41,126	566,000
New Hampshire.....	11,267	174,000
Vermont.....	22,007	390,000
Massachusetts.....	1,080	17,000
Connecticut.....	2,193	31,000
Spring wheat.....	12,042,896	145,298,000
Total.....	34,189,246	357,112,000



## Press Comment.

### SPECULATION IN GRAIN.

We would like to give our country brethren disposed to speculate in grain options a pointer: 1st. Don't. 2d. If you must, then buy corn or oats—not options—at a low value and sell it at a full value. If you must speculate, do it legitimately and always have something to show for your money. But above all, keep out of that "open and shut game of heads I win and tails you lose"—the Chicago option market.—*Peoria Commercial Report*.

### THE UPPER AND THE NETHER MILLSTONE.

The bucket-shop bill introduced by Senator Salisbury is in good shape to become a law. It has taken its place on the Legislative calendar and will come up in due course of time. A majority—over two-thirds—of the legislators at Jefferson City are friendly to the Salisbury bill, and will support it both by their influence and suffrage. Representative Jones has also introduced a bill that means unfriendly legislation for the bucket shops. Between the Salisbury bill and the Jones bill these illegitimate grain gambling resorts will be ground to fine powder. The gentlemen who are prepared to take all bets as to the advance or decline of produce and stocks will be utterly extinguished by the provisions of these bills. Their dishonest, gambling occupation will be gone on the passage of the pending proposition.—*Kansas City Star*.

### A MASSACHUSETTS SHORT-HAUL LAW.

It is timely to mention that the Massachusetts short-haul law works to the entire satisfaction of the people of the state, while it is enforced as thoroughly as any other statute. No railroad corporation in this state is permitted to charge for the transportation of freight to any station on its road a greater sum than is at the time charged for the transportation of the like class and quantity of freight from the same original point of departure to a station at a greater distance on its road in the same direction. The language is exact. It differs from the pending clause of the inter-state commerce bill in that the movement of merchandise brought under its provisions must be from the same original point of departure, and in the same direction, in order to make a greater charge for a shorter haul illegal. This statute is generally admitted to be just, and it certainly has not put an end to the payment of dividends by the Massachusetts companies.—*Ex.*

### A WAIL FROM THE ROADS.

To regulate commerce is to govern it. But to govern does not mean to enslave. There is a vast difference between a free man under republican institutions and a slave. The Reagan-Cullom bill, by courtesy called the Inter-State Commerce, might, with the utmost propriety, be called the anti-railroad bill, for it simply deals with this class of carriers. And it is questionable whether its provisions, while pretending to regulate railway property, do not in fact confiscate it. The bill practically takes away all independent action from the companies, and puts into the hands of five men the making of rates and the complete control of the properties, as it is claimed, for the public good. But the taking possession of private property for the public good is confiscation. Thus it is manifest that Congress has exceeded the power which the framers of the Constitution meant to confer, and in its efforts at regulation has virtually practiced confiscation. If the bill that has passed both branches of the National Legislature be not confiscation, its difference from it is slight and technical.—*Railway Register*.

### THE POOR WHEAT BULLS.

The people who trade in wheat in the United States are very much troubled over the dilatory way in which the magnates of the great powers in Europe deal with the war question. The latter surely do not know the extent of discomfort and the vast amount of loss that have been incurred in waiting on their pleasure, or they would be more prompt to let a suffering world have full information in regard to what they propose to do. They cannot be aware that a whole army of speculators hangs in breathless suspense on the issue, not caring particularly for the rights or wrongs of the situation, or thinking much about the cries of the wounded or the shrieks of the widows and fatherless who would be made such by a war. Apparently these are minor points, about which the speculative world has little concern. But it is vitally interested in being informed at the earliest possible moment whether war is to be "voted up or voted down." Cruel Boulanger, and still more cruel Bismarck, to keep the traders on the tenter hooks of expectation through all these weary months, and with no prospect of a solution of the grand problem for several weeks to come. The fact that both emphatically declare there will be no war does not relieve them of the fearful responsibility, for they are not believed.

Wednesday the noble army of wheat-holders grew tired of waiting and joined in a grand rush to sell. They acted like a lot of sheep who stampede after a leader that breaks through a hole in the fence and make haste to get on the other side without stopping to see what is there. The change in the weather here may have had something to do with the movement occurring just when it did, but no one can doubt that the grand motive was disgust at the delay on the other side of the Atlantic. The decline may not have been particularly in the interest of the men who

grow the grain in this country, but they have few rights which the wheat-scalper feels bound to respect. It was, however, in the interest of the widow and the orphan on this side of the big water, and if it shall prove to have been based on a well-founded conviction of peace, the event will be a still greater benefit to the poor people of the Old World, who would endure all the suffering due to war and reap none of the advantages that follow a victory.—*Chicago Tribune*.

### REGULATING ELEVATORS.

A correspondent of the *Pioneer Press* says the one thing necessary and indispensable is that every facility shall be provided by railroads to enable producers to load their grain in cars and ship it themselves to such places and people as they may select. The opportunity thus given for competition would soon regulate all abuses. Every farmer who for lack of cars is forced to put his grain into a country elevator is taxed from three to five cents a bushel. Whether the farmer wants his grain cleaned or not, the elevator men say: "We can only give you a grade for your wheat cleaned," and they charge one-half cent per bushel for the cleaning. Should the farmer wish to transfer his wheat to Duluth he is charged freight upon the dirt which he has paid one-half cent for cleaning out, and in many cases another one-half cent for cleaning at the terminal point.

Having once been forced to put his wheat in a country elevator there is no help for him. The company then has an alien of about three cents per bushel upon it that shuts out other buyers. Special rates are made for handling and storing large lots of about 25 per cent. below the regular charges, but the small farmer must pay full prices.—*Minneapolis Market Record*.

### A CANAL PROJECT.

The favorable report submitted to the Chamber of Commerce yesterday concerning the construction of a canal to connect the Mississippi River with the great unsalted sea, is a matter deserving the serious consideration of our lawmakers. It is doubtful whether any scheme of greater public importance has ever been brought to the attention of our Northwestern people. Once it was supposed to be chimerical. Now it is demonstrated to be practical, and at a cost comparatively insignificant. It is not a scheme of local consequence exclusively, but it involves interests of national importance. When once the waters of the Mississippi and of Lake Superior are united there will be a great unbroken inland sea extending through the heart of this vast country, and circling on until New York and New Orleans can be brought in direct water communication without the perils of an ocean voyage. The maximum cost of the projected canal is estimated at \$20,000,000. When we remember that the saving in freight on the grain products of Minnesota and Wisconsin alone would pay the cost of construction within less than ten years, it does seem that there ought to be no hesitation on the part of these two states to take hold of it at once. But when it is furthermore demonstrated that the making of this canal will add more millions annually to the industrial products of the Northwest than the total cost of the canal, it does seem that there should be anxiety to hurry its completion. And in addition to all this, when once Congress understands the national importance of this enterprise, the Federal Government will promptly contribute to its construction. In the meantime it will be necessary for the initial steps to be taken by the legislatures of the two states most directly interested in the matter. Minnesota and Wisconsin must be the first to put their shoulders to the wheel. The gods help those who first help themselves.—*St. Paul Globe*.

### WHY NOT DO SOMETHING?

There is a strong probability that a new commission rule will be adopted by the Board of Trade, and rates re-established on something above a starvation basis. The old rule was good enough if it had been enforced, but instead of adhering rigidly to the regular schedule of commissions many members sought to compete with bucket shops for the retention of business by shading commissions. Finally the rule was more honored in the breach than the observance, and for the protection of those who honestly sought to live up to the tenets of their obligations to the Board the penalty clause was repealed and everybody was placed on a par. For a year commissions have been pared to the bone and profits narrowed down to the little end of nothing, figuratively speaking.

Competition among commission merchants and brokers for business have been carried to ruinous extremes. Bucket shops have thrived and grown fat while the legitimate trade suffered terribly from the strain. The reason of this is that bucket shops can afford to do business for nothing. Nay, more than that, they can afford to pay, and do pay, for the privilege of "taking trades flat;" that is, without commissions. They can do this because they do a gambling business on capital furnished by the gentlemen who are foolish enough to bet against them. They carry on a "sure thing game." Now the commission merchants are sensibly making up their minds not to pursue further the suicidal, throat-cutting policy that has prevailed of late, but to adopt and enforce commission rules that will enable them to command a decent compensation for services rendered.

What folly it is for commission merchants and members of regular exchanges to attempt to deceive themselves as to what is the matter with them. It is the bucket shops that have taken the outside business away from them. The bucket shop is a parasite that is sucking the life blood of legitimate trade. It must be destroyed before

there can be a return of healthful conditions. Various remedies have been suggested for accomplishing this, but there is only one way to effect a cure, and that way is by legislation.—*Chicago Daily Business*.

### SARCASTIC ON DONNELLY'S BILL.

Now this is very well as far as it goes; but, like the bill introduced the other day compelling railroad companies to furnish members of the legislature and state officials with free transportation, it does not go far enough. If the Legislature of Minnesota is going into the business, discarded by all other states, of fixing such arbitrary rates as will best suit the farmers, without any regard to the question whether the railroad companies can afford to carry wheat at those rates, then clearly there is no reason why the farmers should be treated so shabbily and with such little consideration for their interests and wishes as they are in this bill. Be it observed that these railroad corporations are recognized enemies of the people; soulless monopolies, having no rights which anybody, and least of all a state legislature, is bound to respect; that the owners of railroad property are recognized by the courts as such a despicable set of outlaws that they are the only class of people who put their money into business enterprises who have no control whatever over their own property; that the state legislature has the absolute power to fix such rates of transportation over their lines as it sees fit; and yet the house deliberately passes a bill which compels a farmer to pay these odious monopolies all the way from 7 to 17 cents for carrying his wheat for different distances, when it could just as well have fixed these rates at one-fourth or one-tenth the figures named in the bill. This is simply outrageous. We desire to call the attention of the Farmers' Alliance to this shameful betrayal of the interest of the farmers by their accredited representatives. If there is any reason why the legislature should compel farmers to pay fifteen cents for a service which they could just as well fix at five cents, or one cent, an outraged public would like to know just what that reason is.—*Pioneer Press*.

### FAIR PLAY FOR SHIPPERS.

It is unjust discrimination that has given force to the demand for the enactment of an inter-state commerce law. The people have seen railroads—which, as common carriers, should be open to all patrons on equal terms—used to crush one merchant or one corporation for the enrichment of another merchant or corporation in the same business. They have seen railroads used to build up great and unscrupulous monopolies, which have spent a part of the wealth thus gained in corrupting legislatures and public officers. The people at large know very little about the theory of pools or the arguments relating to rates for long and short hauls, but they can see that when one shipper can have his goods carried for one-half the rate exacted from his competitor for the same service the railroad service has become an instrument of oppression.

A corporation desiring to monopolize a business or an industry depending upon transportation for its development determines to crush all of its rivals. It induces the railroad companies to carry its goods for a rate of 10 cents, to exact from its rivals a rate of 35 cents for the same service, and to give it 70 per cent. of the money paid by those rivals. Under such conditions how can the unfortunate rivals hope to enter upon equal terms with the favored corporation the markets in which all must sell their goods? But this is the way in which the Standard Oil Company crushed independent refiners and built up its monopoly. It made such arrangements even with railroads that were in the hands of the United States courts. The court of last resort has declared that state legislation affords no remedy for such abuses. There can be no relief except by the enforcement of the federal statute.

This infamous method of discrimination has been used in thousands of cases for the enrichment of favored persons and the impoverishment or ruin of others.—*New York Times*.

### THE THING TO DO.

It is a very good law, all things considered. If we can manage to get an efficient commission, there is but one possible reason for the law failing to bring us some relief. That reason will be found in the possible lukewarmness of the people. We are very apt to labor for years to obtain legislation, and after we get it go fast asleep over it. The Granger legislation and the decision of the supreme court with reference to it is a conspicuous illustration. For the last ten years we have been struggling to get Congress and our legislatures to do something to protect us from the greed of the railroad monopoly. In time and money we have absolutely expended millions of dollars in this ten years' struggle. Yet it was all settled nearly a quarter of a century ago. But through our supineness we did not force the matter to remain settled. We satisfied ourselves by sitting down and laughing at the discomfiture of our opponents.

They did not laugh, however. They had more important business on hand. They bent their energies to the re-enslavement of the people, who, through strenuous effort, had been declared free by legislatures and courts; and they succeeded in accomplishing their purpose. With the law all on one side, the railroad monopoly actually developed into a more monstrous oppression than it was before we had any law or any decision from the court. Then we went to work to thrash the old straw over again, and we have just got the thrashing done or about done; and now what? Shall we go to sleep again? Shall we let the railroads select the commissioners and run the thing to suit themselves? The law may not be all that some of us could wish, but sound judgment will suggest that we up-



hold it by public opinion, as being better than nothing and the best thing we have. Let there be no holding back in the breeching in this matter, but let us pull together and make a united demand that the law shall be faithfully executed. That will not prevent us from seeking something more to our liking. Let us use to the fullest extent what we have. Execute the present law and strive for something better, if the present law does not work satisfactorily.—*Western Rural*.

#### THE COMING CROP SEASON.

After careful thought and calculations on the weather we have concluded that Iowa and Illinois, in 1887, will produce one of the greatest crops of recent years. We cannot now give all our reasons for these conclusions, but will do so as opportunities occur.

In latitudes where oats can be sown very early, the warm growing weather that will occur from April 1 to 12 will give the grain such a healthy start that it will go through the cool weather following without injury. But between the 12th and 23d of April will occur such cold weather as to rot the oats that have not a good growing start. Generally, especially in northern latitudes, it will be better to sow oats after April 23. Heavy cold rains about April 17 will be very unfavorable to grain in the ground that is not up and growing.

From April 24 to May 24 will be very fine farming weather, and warm, except the heavy storms about May 10 and 16 that may give too much rain. A very bad storm period will occur the last week of May that will cause too much rain and injure the crops by washouts. Corn planted early in May will be less damaged by this bad storm period than if planted later.

It is not necessary to give details now, but will reiterate that farmers will be well repaid for their work this year. The chances are very much in favor of an increased yield of corn over the average of many years past, and we advise a large plant of that staple crop. The general rainfall will be greatly increased over that of last year.

The winter of 1887-'8 will be much more open and mild, with plenty of water for stock, and farmers should plant and sow with a view to what kind of feed is best for an open winter. While there will be some heavy rain or snow falls at the heavy storm periods of March 1, 19, and 31, the heavy rains near the storm periods of April 16, May 16, and the last week of May, there will be a gradual increase in the average rainfall throughout the year.

Crops will grow very rapidly and mature quick. Corn may have a tendency to remain green until late, on account of August and September rains, and should be put in the ground the last of April or first of May.—*Burlington Hawkeye*.

#### GARRULOUS CLARKE.

President Clarke, of the Illinois Central Railroad, doesn't like the inter-state commerce bill. Neither does he think Congress knows much. He recently worked off this chunk of railroad wisdom on a New York Tribune reporter: "The fact is that there was never any more preposterous notion than that five men will be competent to regulate the commerce of this country when 10,000,000 men have been trying to regulate it for years and years. These 10,000,000 comprise bankers, merchants, brokers, railroad men, farmers, and shippers of all kinds. They are men who know more about the shipping business, about the transportation business, and about railroad business than the best equipped man in Congress. I was over in Washington a while ago, and sat in the gallery looking down on these representatives of the people. I declare to you that I believe I could bring together 400 track-hands who possess more intelligence than the American Congress. I never knew such a piece of absurdity as that these fellows should be understood as being able to solve the transportation problem." You should take a sedative, Mr. Clarke. You are evidently excited about something. "Those fellows," as you call Congressmen, have not pretended that they have "solved the transportation problem." If they had thought they had solved it, there would have been no need of their providing that "five men" should hereafter devote their energies to an attempt to work it out in the direction of a just treatment of all interests. You think "five men" will not be competent to regulate "where 10,000,000 men have been trying to regulate for years and years." Possibly not, Mr. Clarke, possibly not. But did you ever think that commerce might not be so beautifully unregulated as it is now, if a good many of those 10,000,000 had refrained from giving their wisdom to the problem? In a multitude of counsels there is safety, possibly, but there is also a chance of getting things a good deal mixed up. Did you ever let your mind struggle for a brief half hour with the idea that there might be something in letting the 10,000,000 keep their hands off for a while, and giving these five a chance to try what they could do? Hasn't each man of your 10,000,000 regulators been regulating with a view to getting a special rate, or a rebate, or a discrimination for himself or his town, which should give an advantage over other men and towns, and isn't this the reason why the people and Congress have concluded to make an effort to abolish the 10,000,000-regulator system, and try the five-man system? Certainly, Mr. Clarke, the 10,000,000 men you mention may "know more about transportation business than the best equipped man in Congress"—that is, about the transportation business as mismanaged by railroad companies; but we wouldn't admit that they know more about how commerce ought to be regulated than the "best equipped man in Congress," or the poorest equipped man who is likely to be named as one of the "five." And if you can do, President Clarke, what you say you think

you can, "bring together 400 track-hands who possess more intelligence than the American Congress," then it is evident that there ought to be some changes in the distribution of the brain power at the command of the roads, some stepping down and out, and some promotions from the ranks.—*St. Louis Grocer*.

#### AN OPPORTUNE TIME.

The time is favorable for a reduction of rates at non competitive points. Large amounts of 7 and 8 per cent railroad bonds are coming due to be refunded at 4 and 5 per cent, thus greatly lessening fixed charges, and then the Interstate Commerce act itself will save the roads great sums of useless expenditure, so that they may reduce rates for short hauls and still make large enough profits. But all experience shows that a judicious reduction of local rates stimulates business and increases railroad receipts much faster than expenses. In this state after the railroads were compelled by law to reduce their tariffs over 30 per cent their profits increased enormously through the expansion of the traffic, their credit was strengthened, and their stocks rose greatly in value. Much the same effect should follow throughout the United States when the railroads are required to cease taxing local traffic for all it will bear and endeavor instead to promote business at non-competing points and build up flourishing stations all along their lines. Railroad officials ought to be content to abandon the short-sighted policy of squeezing local business and allowing long-distance traffic only to enjoy the benefits of competition. They thus develop a business which can take one line as well as another, and neglect that which belongs naturally to their own road. Instead of freezing business out of the intermediate points and forcing it into the terminals each road should endeavor to build up its own towns and give them rates to develop a profitable volume of business. In seeking to obey the Interstate Commerce act cheerfully and in good faith railroad officials must not forget that the chief aim of that measure is to secure a reduction of rates on local business and a readjustment with some regard to the charges on competitive traffic between terminals.—*Chicago Tribune*.

#### THE WHEAT TRADE OF MINNEAPOLIS.

Minneapolis is not only the largest wheat market in the country, but it is vastly the most important because it uses the grain as the raw material of a great manufacturing industry. And this market has by no means reached its climax, for Minneapolis was never so advantageously situated in respect to the grain trade as it will be next year and thenceforth, on account, first, of facilities for getting grain, and second, of facilities for shipping grain and flour. The rapid growth of the Duluth market this past season has been due in large part to the attempted diversion of grain from Minneapolis by the discriminating rates of the Manitoba Railroad system. The new Minneapolis & Pacific is in position to checkmate that game and fully to protect the interests of this city. It can make it to the unquestionable advantage of the producers throughout a very large region west of us to ship their wheat to Minneapolis. The immediate benefit will accrue to the producers, whose transportation rates and market facilities will be decidedly improved. The secondary benefit will be realized by this city. As to facilities for reshipment, the Chicago rate has been forced down to a permanently low point by new competition, and the rate to the lakes via the Duluth road or the Washburn route will never be formidable again. But the new "Soo" line, owned by Minneapolis men, is going to hold the key to the situation, and it promises us such facilities for reaching New England and European markets as must greatly stimulate our grain market.

These advantageous conditions must have the effect greatly to increase the quantity of wheat received here for transshipment. Why should they not also increase the amount received for milling? It has been said that the flour industry of this city has reached its maximum. But with improved facilities for getting grain and sending away flour, the popular and world-famed product of the Minneapolis mills ought to expand from six millions of barrels this year to seven millions in 1887, eight millions in 1888, nine millions in 1889, and ten millions in 1890.—*Minneapolis Tribune*.

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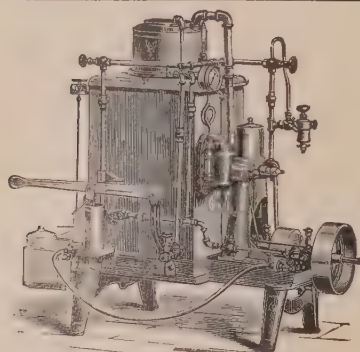
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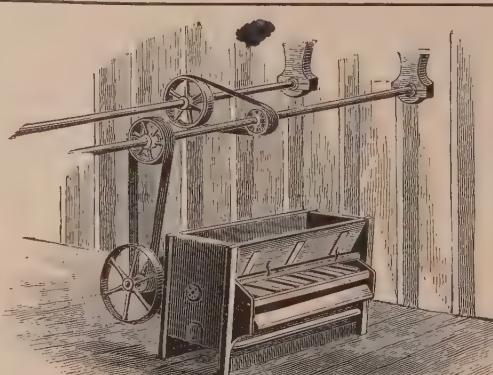
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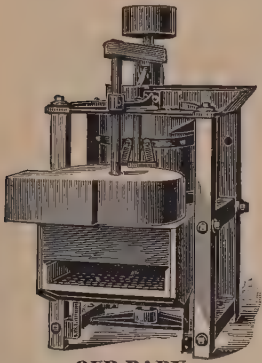
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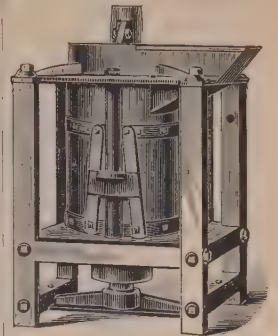
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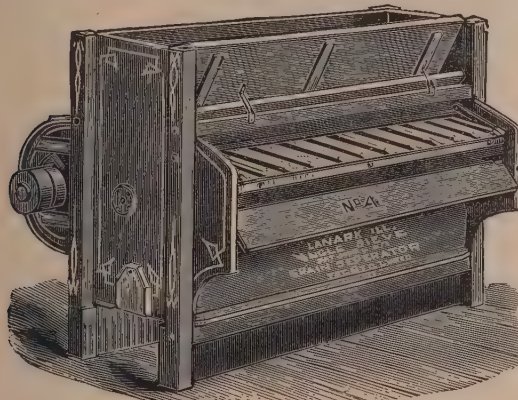


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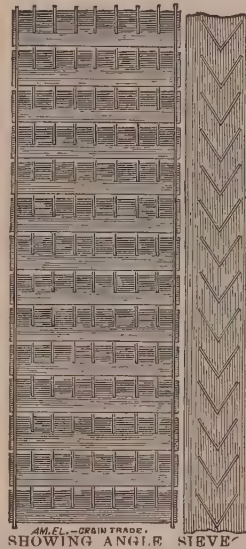


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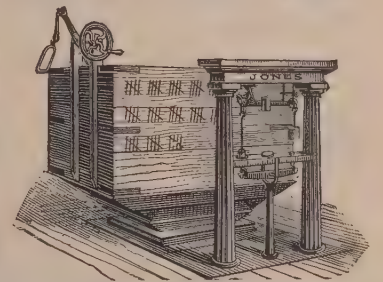
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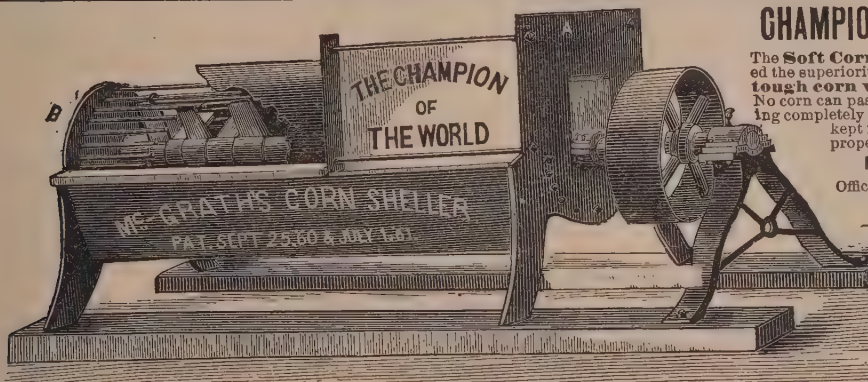
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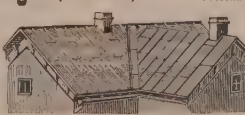
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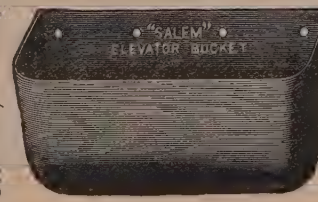
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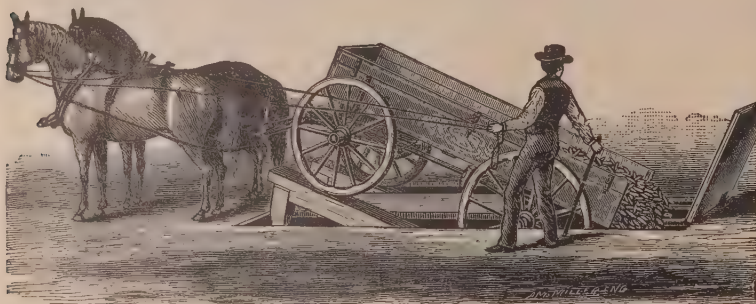


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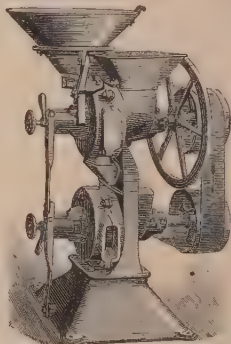
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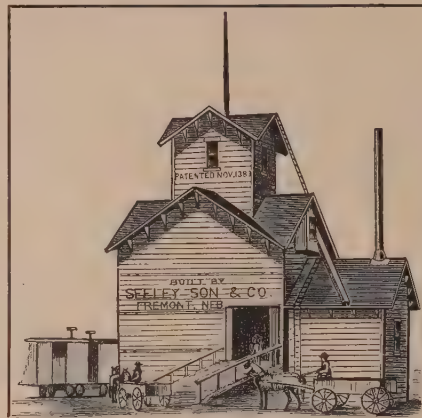
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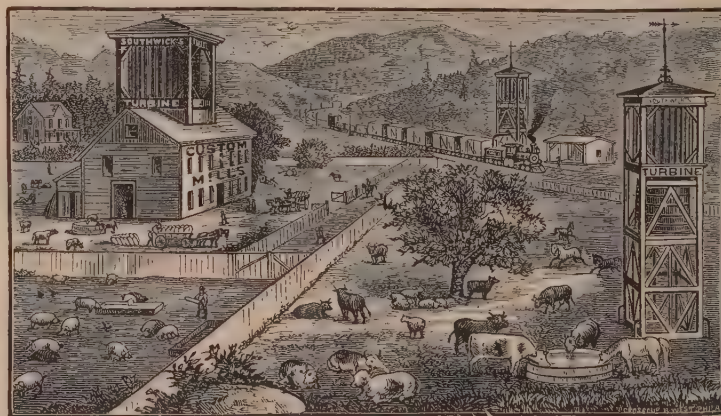
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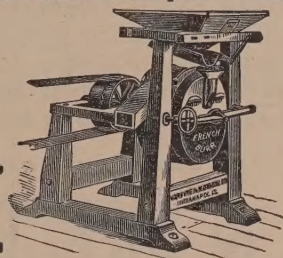
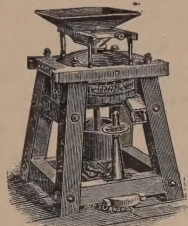
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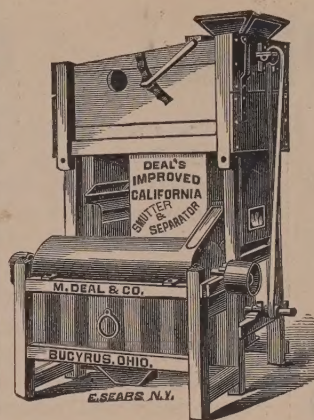
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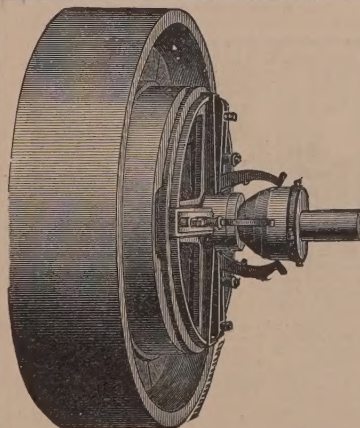
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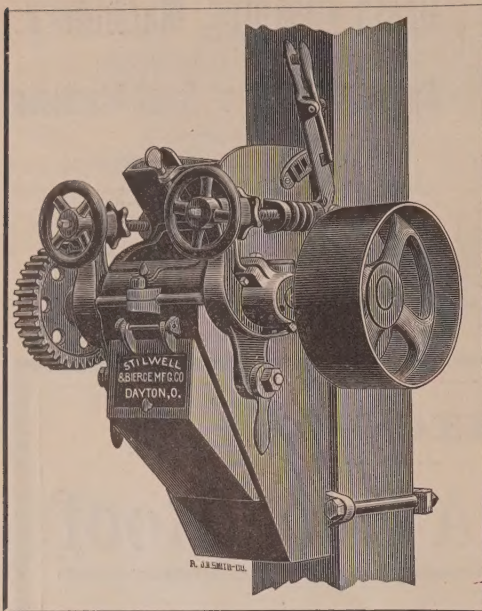
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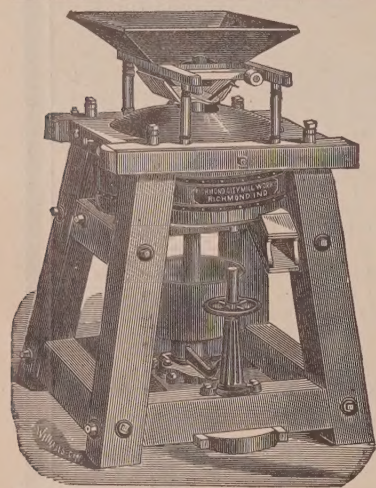
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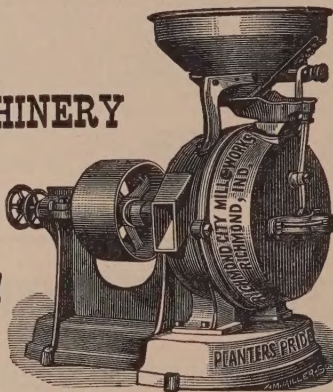
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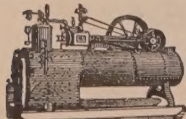
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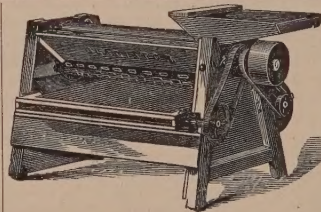
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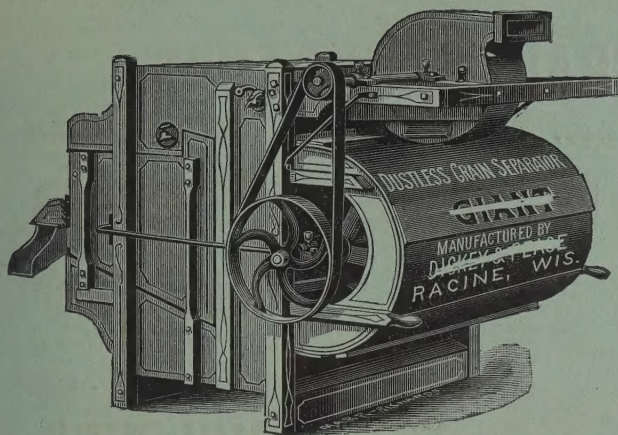
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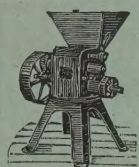
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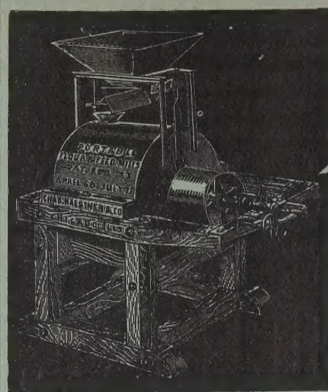
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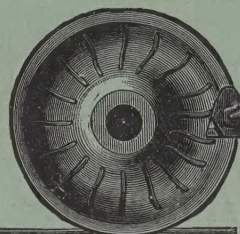
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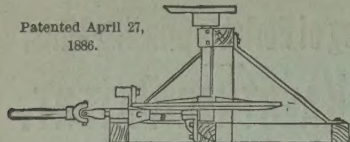
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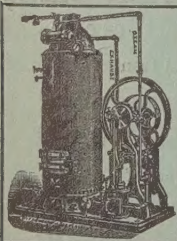
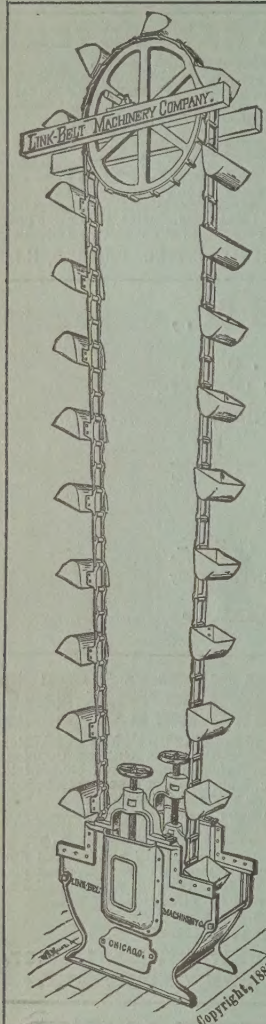
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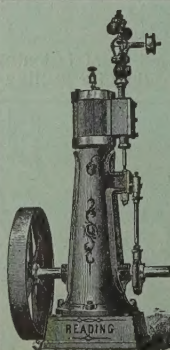
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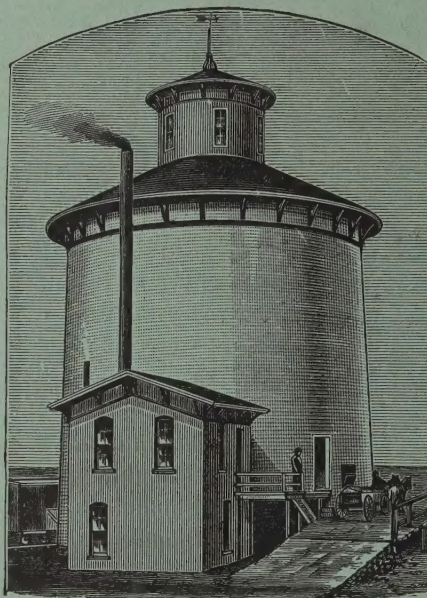
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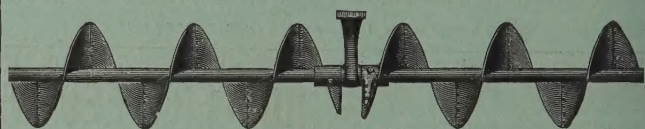
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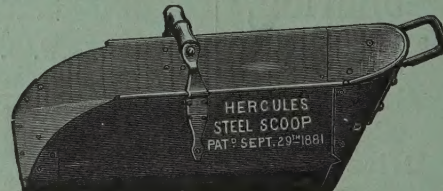
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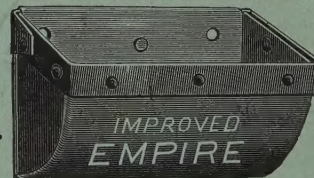
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